

Miss June 1842.

Trieste 26 Janvier 1842.

Mon cher Monsieur

Je suis enfin dans la possibilité de satisfaire à l'engagement que j'ai contracté par ma lettre du 8 Avril d. en répondant à votre très appréciée du 22 Janvier a. p. - Vous recevrez donc par le moyen du Navire Américain *Arctusa* Capitaine Allen Baxter — un paquet de plantes parmi lesquelles vous retrouverez vos Désiderata de mon catalogue, avec fort peu d'exceptions, et en outre plusieurs espèces qui n'étaient pas comprises dans le catalogue de 1840, et que j'ai choisies parmi les collections de l'année 1841, en supposant qu'elles vous seraient particulièrement intéressantes et agréables. Il y en a bien aussi quelques unes de celles que j'ai ^{déjà} eu l'avantage de vous offrir lors de votre passage par Trieste le printemps de 1839, mais ces doubles sont bornés à un petit nombre d'espèces des plus rares et particulières à notre Flore, de manière que j'espère qu'elles pourront au moins vous être utiles pour en fournir des échantillons à vos amis, comme vous me l'avez indiqué vous même.

L'apprendrai avec beaucoup de plaisir que cet envoi
soit arrivé en règle en vos mains, et que vous l'ayez ac-
gré tel qu'il a l'objet de vous offrir un faible gage de
ma reconnaissance, et de mon estimation très distinguée.

Si, comme je l'espère, il me sera possible d'enrichir dans
la suite ma collection de doublettes par d'autres espèces
rares de la Flore illyrique, de même que de celles des provin-
ces voisines, Carinthie, Styrie et Hongrie, je ne laisserai pas
de vous en donner part, et je serai très satisfait, si de
cette manière je pourrai être dans le cas de vous offrir
encore quelque chose.

La lecture de votre très savant ouvrage sur la Flore de
l'Amérique du Nord m'engage à braver les obstacles que
m'oppose le langage dans lequel il est écrit; heureusement
n'est il pas si difficile d'arriver à comprendre les phrases
et les termes usités en botanique, qui se rapprochent dans
toutes les langues à la terminologie adoptée généralement.

Mons. Biasoletto se rappelle à votre souvenir

amical, et me charge de vous présenter ses amitiés.
Quant à moi je vous prie, mon cher Monsieur, d'accep-
ter l'assurance de la plus parfaite considération, et de
devouement avec lesquels je suis

Votre

très dévoué et sincère

Cher M. Tommasini

Je serais bien aise de connaître
les observations que vous ferez sur
les plantes de mon envoi, si vous
vouliez me les communiquer en latin
il me serait plus facile d'en profiter.

Monsieur -

M. le Docteur Asa Gray

à remettre

à M^{rs}.

Wiley & Putman, New York

Libraires. 161. Broadway.

Trieste le 20 Avril 1846.

Plts - 1 Bell-
2 Oaks
3, Sadwell
4, Lomell - to buy Southern Lignum
5, Forney
~~6, Lomell~~
Mon cher et très cher Ami!

Amund

Avril. 25

Veuillez bien m'excuser de ce que j'ai retardé si longtemps de répondre à votre très appréciée lettre du 14 Octobre d. Après avoir attendu l'arrivée du Navire par lequel vous me fîtes un envoi très riche de belles plantes de l'Amérique envoi que je reçus dans le mois de Decembre d. en parfaite règle /- je me proposai de préparer un choix de plantes de mon pays, et des provinces de l'Autriche voisines à la notre - de manière à pouvoir vous en annoncer l'expédition par ma réponse même; et c'est la cause pour laquelle celle-ci a été différée jusqu'à ce moment. Maintenant j'ai le plaisir de vous présenter que par le premier Navire qui se rendra d'ici à Boston ou New York (et l'on me fait espérer qu'il y en aura quelque un en peu de semaines /, je vous adresserai une caisse qui est déjà prête, et contient 7 paquets, dont 6 avec 710 espèces de la flore du litoral autro-illyrien, et le 7^{me} avec une centurie environ d'espèces plus rares de la Perse, Cauc. Libie et Syrie. Les exemplaires sont en nombre de 5200 environ.

Pour vous mettre dans le cas de faire part à vos amis d'un certain nombre de ces plantes, j'ai eu soin d'en réunir autant qu'il m'était possible pour celles de la première catégorie, c'est à dire pour les illyriennes, 5 exemplaires de chaque espèce; quant aux espèces petites ce nombre est double et même plus considérable. Par cela il vous sera assez facile de former 4 à 5 collections presque égales pour la plus grande partie de ces plantes. — il n'y en a que fort peu pour lesquelles le petit nombre de doubles disponibles m'a obligé de me borner à une quantité minime. Il en est de même des espèces qui constituent le 7^{me} paquet, et qui appartiennent à d'autres provinces, puisque je tiens ces plantes de mes amis et correspondans, qui n'ont pas toujours suivi la même règle dans leurs envois.

J'espère que vous pourrez satisfaire aux desirs de M. Balthes aux soins duquel je dois plusieurs des belles plantes de votre envoi, et dont il me sera bien agréable d'en recevoir des autres, en échange desquelles je lui en offrirai dans la suite des nouvelles, ou bien la répétition de celles qu'il désireroit avoir encore. — Je me permets de vous observer, que la collection de plantes américaines que je possède déjà par votre bonté, et par les soins de quelques autres amis, est plus riche en espèces qui appartiennent aux états du Nord

qu'en celles des régions de l'Ouest et du midi. En tout cas j'accepterai avec reconnaissance quelque chose il m'aura à M. Balthes de m'adresser.

Vous aurez sans doute reçu de M. Fenzl l'avis que les objets destinés par mon entremise au Cabinet impérial lui ont été expédiés en règle.

Votre très appréciable et chère *Flora de l'Amérique du Nord* continue à enrichir ma Bibliothèque; veuillez bien en agréer mes remerciements. Je serais bien content, si je pouvais déjà vous offrir la *Synopsis Flora illyrico-litoral*, pour laquelle j'ai préparé un grand nombre de matériaux, mais il me manque le temps nécessaire pour les arranger, et il n'y a pas d'apparence que cet empêchement cesse de si tôt.

Je suis, mon cher Monsieur, avec les sentimens de la plus parfaite considération

Votre

très dévoué

M. Tommaring Freund.

Maisieu

M^r le Docteur de la Faculté

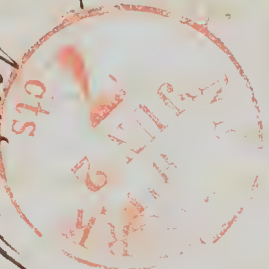
Docteur en Médecine Professeur de Médecine

à l'Université d'Harvard

Massachusetts

Cambridge

Etat de l'Union Américaine de l'Est



55

CO

Picote le 6 janvier 1847.

Monsieur, A cher Ami

Je suis infiniment sensible aux soins que vous avez pris par rapport à mon envoi de plantes, dont votre chère lettre du 25 Novembre D^m m'a annoncé l'heureuse arrivée; et je ~~suis~~ suis d'autant plus obligé, que votre temps étant si précieux et réclamé par des nombreuses occupations scientifiques, vous en avez pourtant voulu dédier une partie à l'arrangement de ces plantes, et à les distribuer parmi vos amis, pour me procurer des secours de leur part. Toute acquisition qui en dérivera à mon herbier me sera bien agréable, et je la regarderai comme un effet de votre amitié. Mais ne vous donnez pas de peine pour hâter les envois, il vaut mieux qu'ils arrivent en sûreté, ce qui est plus facile à obtenir dans la bonne saison, et je recevrai en quelconque temps avec plaisir ce que Mess^{rs} vos Amis voudront me destiner, comme une marque réelle qu'ils ont agréé mes envois par votre médiation. - Je me ferai un charge particulier d'accomplir vos desirs par rapport à M^r le D^r Torrey, personnage bien respectable, et pour lequel j'ai beaucoup d'estime; je chercherai de réunir pour lui un choix de plantes rares illyriennes, et de celles que j'ai reçu de mes amis de la Carinthie, Styrie &c, dont je n'ai pu jusqu'à présent vous fournir un nombre d'exemplaires égal aux miennes. Aussi bien chercherais-je de contenter M^r Bakker par des envois successifs en échange des siens. Il me faudra seulement réclamer de votre indulgente amitié un délai convenable pour de nouveaux envois, car le temps me manque tout à fait, étant toujours pressé par des occupations publiques, qui ne me laissent que fort peu d'instans de liberté. - En attendant je vous remets ci-joint un catalogue nouveau de doubles, formé sur les collections de l'été dernier, et contenant des espèces qui n'étaient pas comprises dans les catalogues des années précédentes, ni par conséquent dans mon envoi du printemps passé. Veuillez bien l'examiner, et y noter

les espèces dont vous désirez avoir des échantillons pour vous^{même} ou pour vos amis, en me les désignant pour que j'en puisse organiser l'envoi.

L'objet qui m'occupe particulièrement dans cette époque est l'organisation d'un voyage botanique en Bosnie, pays sujet à la domination Ottomane, et habité par une population féroce et très contraire à ~~étrangers~~ étrangers, le quel pays n'a pu être visité jusqu'à nos jours par nul voyageur scientifique, et est encore inconnu particulièrement par rapport à l'histoire naturelle, quoiqu'il soit beaucoup plus rapproché des centres de la civilisation que beaucoup d'autres pays déjà bien connus. L'amitié du Médecin primaire du Pacha actuel m'a procuré le moyen d'obtenir la protection de celui-ci en faveur d'une exploration botanique, qui sera entreprise, d'après l'annonce ci-jointe, dès le printemps prochain par le Doct. Otto Soudner, bavarrois, botaniste très distingué et âgé, dont j'ai expérimenté la capacité pour ces sortes d'entreprises pendant trois ans de suite. Comme aussi il fit précédemment un voyage dans les Indes pour le compte du Gouvernement prussien, principalement pour la recherche des mousses, dans la connaissance des quels il est très fort. — Avec un appui moins puissant de celui que je lui ai obtenu il aurait été tout à fait inutile de tenter de pénétrer dans ce pays sauvage; et comme pour cette raison l'entreprise mérite l'attention des savants, je m'en promets aussi des résultats très satisfaisants, puisqu'elle a pour objet de défrayer un champ riche et nouveau; car la Bosnie promet par sa situation, son climat, et la qualité de son terrain, entrecoupé par des hautes chaînes alpines, une végétation aussi variée que riche de plantes rares et belles. Les nombreuses découvertes faites il y a quelques années dans l'intérieur des provinces turques, de la Roumélie et Bulgarie par Griesbach & Priwaloff^{off} offrent les preuves de ce qu'on peut justement espérer de la Bosnie, pays encore plus montagneux, couvert de hautes forêts, et fertile en même temps. — Quoique le nombre des associés (parmi lesquels nous comptons mes amis Messrs. Benthams, Boissier, Visiani, et les plus respectables noms de l'Allemagne) soit déjà assez considérable, il reste à souhaiter qu'il s'augmente encore, pour que le

Voyageur soit en état de disposer de fonds suffisants pour donner à son entreprise une plus grande étendue, et pourvoir à tous les besoins particulièrement pour les aides qui lui seront indispensables, et qui exigent une dépense assez forte.

Voilà pourquoi je me permets de vous entretenir de cette affaire, et de vous engager à lui accorder votre bienveillante protection, qui sera sans doute très influente, pour procurer s'il est possible quelques associés en Amérique, ou les plantes de la Bosnie présenteront bien certainement l'intérêt de la plus grande nouveauté. — Le prix fixé pour l'association à 50 florins d'Allemagne, ou 5 livres Sterling est modique pour la quantité de 7 à 800 espèces que le Voyageur s'engage à fournir. Peut-être y aurait-il chez vous quelque amateur d'autres objets d'histoire naturelle, tels que Minéraux, insectes, ~~etc.~~ etc. Soudner se propose de faire aussi des collections. — Comme le voyage va être entrepris vers la fin du mois de Février prochain, pour commencer dès l'ouverture de la saison favorable, et qu'il faut connaître d'avance le nombre pièces des associés pour régler le choix et la formation des collections de chaque genre, je vous prierais de me faire connaître au plus tôt possible le résultat de vos démarches, qui par vos nombreuses relations et par votre amiable médiation procurera, j'en suis sûr, à cette entreprise un soutien nouveau. Veuillez bien en ce cas vous faire remettre par vos associés le montant des actions qu'ils auront prises, et me le faire arriver ici par le moyen de quelque maison de Commerce.

Si le Navire Chusan dont vous m'annoncez le prochain départ sera favorisé par le temps dans la traversée il pourra être ici dans le courant de Février; je recevrai avec plaisir tout ce qu'il vous aura plu de lui confier pour moi. Agréez en mes remerciements anticipés avec l'expression de l'amitié et estimation plus distinguées de

Votre très dévoué
W. Tommasini
Président



#5



Monsieur

M. Le Docteur Asa Gray

Professeur de Botanique de l'Université

de Harvard

Cambridge
Massachusetts
Etats Unis de l'Amérique - Nord



Handwritten signature and initials.

Trieste le 29 janvier 1849.

Mon cher Ami,

Il y a bien longtemps que j'aurais dû vous annoncer la réception
d'un envoi très considérable d'intéressantes plantes de l'
Amérique du Nord, qui m'est parvenue de votre part, par le Na-
vire Perce, Capit. Harris, parti de Boston vers la fin de janvier
1848, et qui arriva ici au commencement d'avril. Les événe-
ments politiques qui avaient éclaté, peu avant cette époque,
et les agitations qui en résultaient pendant tout le cours de l'été
m'ont procuré une quantité d'affaires et de soins bien désa-
gréables, de manière que je dus renoncer pendant longtemps
à toute autre occupation, et interrompre mes correspondances
pour objets scientifiques. J'espérais du reste en recevoir de
votre part quelque lettre, qui eût rapport à cet envoi,
mais cette attente ne s'est pas réalisée, et je suppose que
votre lettre se soit perdue, chose bien facile pendant tant
de troubles et de désordres.

Voilà les raisons pour lesquelles j'ai gardé le silence
jusqu'à présent, sans vous remercier, comme j'aurais dû
le faire, de votre empressement amical à enrichir mes col-
lections botaniques par cet envoi. En attendant je n'ai
pas manqué de mettre à profit tous les instants de loisir

que j'ai trouvée, quoique bien rarement, dans le cours de huit mois
pour examiner ces précieuses collections, et les arranger dans mon
herbier... j'y ai trouvé deux envois extrêmement riches en espèces
et en échantillons de M. M. Lowell et Larivelle, un troisième qui
contient particulièrement grand nombre de Carex et un paquet
de plantes très intéressantes de M. Leger.

Les envois dont vous m'avez parlé dans votre lettre du
25 Novembre 1846 du D^r Mead d'Illinois, et de M. Balle
n'auraient pas été ^{probablement} envoyés à l'époque de l'expédition.
Je vous fais cette demande pour connaître précisément aux
quels de vos amis je suis redevable, et m'acquiescer à mon
tour envers eux. Je l'aurais fait très volontiers au plus
tôt, selon vos desirs et indications, au plus par rapport à votre
distingué collègue M. Torrey, mais les mêmes causes que
j'ai indiquées, m'ont rendu tout à fait impossible d'y con-
siger, et il s'en fera beaucoup pour que les temps soient
après tranquilles. Peut-être toutefois que les circonstances
deviendront plus favorables, et dans ce cas je m'engage-
rai de faire des nouveaux choix dans mes dépôts de
doublettes, qui sont assez considérables, et ne servent à
rien dans ce moment.

J'ai reçu par le même envoi les dissertations
que votre amitié m'a destinées, et dont je vous suis
extrêmement reconnaissant.

Tous mes projets par rapport à la publication
de la flore égyptienne ont échoué contre les subversions po-

litiques auxquelles mon pays a été sujet, et qui sont bien
loin de leur fin, quoique depuis quelque temps nous ayons
un peu plus de tranquillité, au moins en apparence. Mais il
s'en fait beaucoup, pour que l'état des choses soit réglé, et
l'ordre public rétabli.

Agitez, mon cher Monsieur, l'assurance de la
plus parfaite estimation et amitié de votre très dévoué

M. Tommasini
Dreux le 15
Nov

[Faint, mostly illegible handwriting at the top of the page, possibly bleed-through from the reverse side.]

1849
AUG 24
1849

[Handwritten marks and scribbles on the left side.]

BERLIN
8 2

CAMBRIDGE
FEB 10 1849

Muscul to

a Monsieur

Monsieur le Docteur et M. Gray

Professeur de Botanique à

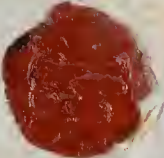
Université de Harvard

Massachusetts

Cambridge

Etats Unis de l'Amerique du Nord

Amesbury



Trieste le 22 Avril 1849.

Mon cher Monsieur

et Ami!

Votre très aimable lettre du 19 Février m'annonce
l'envoi de plantes et de livres, qui m'est arrivé dans
les premiers jours du mois courant par le navire Hamilton
accompagné par la lettre précédente du 28 Janvier j'ai
le plaisir de vous déclarer, que j'ai reçu cet envoi en
parfait ordre, et de vous témoigner ma reconnaissance bien
étendue pour les soins que vous avez bien voulu y dédier à
mon avantage, et dont le choix de plantes rares et nom-
breuses en échantillons, et le don des ouvrages qui enrichis-
sent ma bibliothèque offrent des preuves bien évidentes.
J'ai parcouru avec un très grand intérêt la riche et
nombreuse collection de M. Mead, celle que vous même y avez
jointe, et qui contient plusieurs plantes très rares et nouvelles.
Les cultivées dans le jardin de votre Université enfin celles
de la collection Fendler qui sont d'une beauté ravissante.
La collection de 150 espèces de M. Sager contient des doubles
et d'une autre parfaitement égale, que je reçois par
votre amitié l'année prochaine, elle servira à en fournir mes
amis de l'intérieur qui seront charmés d'avoir des plantes
aussi belles et bien préparées. Recant aux livres, votre
Manuel botanique des provinces du Nord des Etats unis,
et le 1.^{er} volume des Genera illustrata qui forme le commen-
cement d'un ouvrage classique, me sont infiniment précieux
Je vous suis aussi très reconnaissant pour les descriptions des

plantes de Kändler, en vous priant de m'en faire tenir la continuation pour pouvoir achever de déterminer ces plantes, qui sont en grande partie nouvelles et ne se trouvent ni dans le prodomus de Desf. ni dans le répertoire de Walther.

Je serais bien aise de pouvoir vous offrir quelque révanche, et me proposais de le faire au moins par un envoi de plantes, mais plutôt que les circonstances politiques me permettent d'y consacrer le temps nécessaire. - Vous avez, j'espère, reçu ma lettre du 29 janvier d. par laquelle je vous annonçai la réception de vos envois considérables de l'année passée, et vous exposai les motifs qui ont fait retarder si long temps ma réponse. Après cette époque même les affaires d'état étaient nouvellement compliquées, de manière à faire craindre que nous serions replongés dans les détresses qui nous avaient affligé pendant la plus grande partie de l'année 1848. Heureusement les victoires de notre vaillante armée d'Italie ont raffermi l'espoir de la paix, et si elle aura lieu, il sera possible de reprendre l'étude des sciences avec la tranquillité d'esprit, en défaut de laquelle il n'est pas possible d'y songer.

Pour ce qui me regarde personnellement il y a toute l'apparence que par ^{conséquence} le nouvel ordre de choses je me retirerai des affaires publiques, et dans ce cas le reste de mes jours sera entièrement dédié à la botanique.

J'ai regretté beaucoup la perte de très estimable M. Oakes, qui a si malheureusement fini ses jours dans un âge aussi faible. De mon côté je vous annonce si pourtant vous n'en avez déjà eu nouvelle, celle de M. Endlicher, qui est mort au commencement de Mars,

à la suite d'une maladie violente qui a détruit en peu de jours son physique vigoureux. J'ai été pendant le séjour que j'ai fait à Vienne dans le mois de décembre, M. Fenzl notre ami, aussi tranquille qu'on peut l'être à la suite de terribles événements qui eurent lieu ^{dans cette capitale} pendant tout l'été, et en octobre particulièrement. Par bonheur ni lui même, ni les collections confiées à ses soins n'ont eu rien à souffrir. M. Endlicher au contraire ayant eu beaucoup de part dans les premiers mouvements des étudiants, qui sont amers dans la suite les plus graves conséquences, ne se trouvait pas aussi tranquille, et je crois qu'il eut assez à regretter d'avoir été compromis.

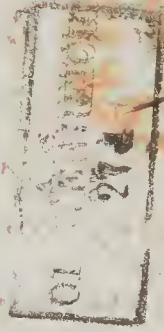
Je ne doute pas que la Flore classifiée des Etats Unis que vous avez commencé à publier avec M. Torrey et dont je salue par votre amitié le premier volume, et les 3 premiers fascicules du second, soit continuée.

Si je puis vous être utile en quelque chose dans ces pays, n'en épargnez pas vos ordres; assurez vous que je m'occuperai avec empressement pour m'acquiescer de manière envers vous et vos amis, et croyez aux sentiments de la plus sincère et estimable la plus parfaite de votre

bien dévoué
M. Tommasin

LS

JK



à Monsieur

M. le Docteur Asa Gray

Professeur de Botanique à l'

Université de Harvard

Massachusetts Cambridge

Etats Unis de l'Amérique du N.

11/4/41

1
Vienne le 16 Octobre 1854.

Mon cher Monsieur!

Permettez que je vienne après un bien long intervalle de temps me rappeler à votre souvenir amical. Je vous écrivis la dernière fois en date du 22 Avril 1849, répondant à votre lettre du 19 Février de la même année. J'ignore si ma lettre vous est arrivée, et j'en dois douter, n'ayant depuis cette époque reçu de vos écrits, quoique vous ayez fait dans la suite un séjour assez long en Europe, dont j'ai suivi avec intérêt les détails autant qu'ils ont été annoncés par les journaux littéraires, comme je pris aussi vive part à l'accident fâcheux auquel vous avez presque dû succomber. Mais j'espère bien qu'étant parfaitement rétabli, et de retour dans votre patrie, vous vous dédier

de nouveau avec parfaite tranquillité à vos travaux scientifiques, et vous serai bien reconnaissant si en quelque moment de loisir vous voudrez me prouver le plaisir de vos bonnes nouvelles.

Quant à moi ayant passé quelques années de troubles pendant les quelles il ne m'était guère possible de m'absenter de ma résidence, j'ai dû me borner à profiter des rares moments de trêve de travail, pour arranger les collections considérables que j'avais formées par moi-même, ou bien obtenues par mes amis dans les années précédentes; celles que je dois à votre amitié y'étaient pour une grande partie.

Dans les derniers temps j'ai repris à former des collections de doublettes, qui se trouvent augmentées par les envois de mes correspondants des provinces de l'intérieur, telles que la Serbie, Styrie, Autriche et Hongrie, de manière que j'ai au cas de vous offrir nombre d'espèces qui ne se trouvaient pas dans mes envois précédents. Si je pourrais à cet égard

garder vous offrir quelques choses, vous n'aurez qu'à me le indiquer, et je m'empresserai de répondre à vos desirs, car je suis encore en dette envers vous pour les belles plantes que vous m'avez envoyées en si grande quantité.

Je vous serai particulièrement obligé pour la continuation des ouvrages d'apiculture dont j'ai tenu déjà des parties par votre amitié, et notamment la Flore de l'Amérique du Nord jusqu'indivisément à la 3.^{me} partie du II^e Volume, et le Général Plantarum fl. Améric. Bor. orient. dont je possède le I.^{er} Volume.

Parmi les plantes de votre dernier envoi recues, en 1849 se trouvaient compris un paquet de celles qui ont été cueillies par M^r Feutler au Nouveau Mexique, dont les étiquettes ne portaient pas les dénominations. Je suppose que celles-ci auront été publiées dans quel que journal ou N^o de l'association, et il me serait très agréable d'apprendre où je pourrais me les procurer.

Veuillez bien excuser mon importunité, et accepter l'assurance de ma parfaite estime et amitié.

Votre très dévoué
M. J. Torrenain
Maître

America

32

32

[Handwritten flourish]

CHEN

PAID

Mr. Dr. Asa Gray,

*Professor of Botany in the
Harvard University*

*North America Cambridge
(Massachusetts)*

Am. Mus. Nat. Hist.

[Red wax seal]

86

And, June 15th

Trieste 26 May 55.

Dear Sir

As you advised me by your favours of the 24th November & 23 March I received some days ago, via Mr. Rich from Mr. Martius the works & botanic dissertations, with which you have been kind enough to favour me. Accept my best thanks for this new proof of your friendship, by which I feel much honoured and which I will try to reciprocate to the best of my ability. Permit me to observe that three exemplars of Dr. Jorey's *Plantae Friessortianae* dissertations came to hand, one of which bears my address, where we conclude that the other two are intended for other parties,

and I beg of you therefore to
let me know whom I am to
forward them to.

The description of the plantae
Gerardianae reaches from the
beginning to page 116, inclusive,
whilst the first exemplar, in
my possession, reached only to
page 88 so that this has now
become for me a duplicate.

I should like very much to be
favored with the continuation
to the end, in order to determin-
e with precision the plants
of Gerard's collection, which
you were so kind as to send
me. An alphabetical cata-
logue with reference to the
numbers of the labels would
perhaps be sufficient in case
the work should extend too
much.

In the second volume of your
magnificent work "*Genera p. fl.
rac. Am. borealis*" there is wanting

the plate 178 which should be,
presently the "*Urginadia speciosa*"
whilst the plate N.º 137 of the
genus *Cordoroxus* is repeated.

I am occupied in causing
some duplicates of our best
plants to be collected for the
purpose of forming at the end
of the year a rather consi-
derable shipment, together with
other plants, which I hope to
receive from my friends in
the Interior of Austria, Styria
Carinthia & Hungary.

Believe me to remain
with great esteem and
friendship
yours very truly.
M. J. Fournier

Griette le 7 Octobre 1861.

Monsieur
à très cher Ami !

Après avoir été absorbé par les ^{des affaires publiques} soins pendant les dernières et de sa très longue anné-
e, j'ai dû à mon grand regret suspendre le cours de mes correspondances particu-
lières, et renoncer pour le moment aux relations les plus chéries, parmi lesquelles
je comptais celles que me procurait votre amitié. Mais puisque les événements
ont eu après heureusement pour moi la conséquence de ma retraite en état privé,
je me trouve dans la possibilité de reprendre mes anciennes occupations, et je
commence à le faire envers vous, Monsieur, en réclamant nouvellement
votre bienveillance dont j'ai déjà reçu des preuves bien marquantes.

L'objet m'en vient offert par le désir d'un ami respectable, le plus
ancien que j'aie parmi les Botanistes ; c'est M. le Docteur Vissiani,
Professeur de Botanique et Directeur du jardin de l'Université de Padoue.
Après avoir considérablement augmenté le jardin confié à ses soins,
il s'occupe de même pour l'Herbier qui est déjà enrichi dans beaucoup
de parties ; mais quant aux plantes de l'Amérique du Nord il se trouve
très au dessous du temps, et les progrès de la science dans ces parties et

riches contrées il s'agit de suppléer à ce défaut par le moyen de relations
d'échange ou autrement, avec les botanistes et amateurs qui sont répandus
en nombre dans les différentes parties des États unis. Ayant eu par votre
amicale médiation l'avantage d'obtenir des collections fort belles de ces plantes,
je me permets de vous engager à appuyer de la même manière par votre in-
fluence le désir de cet Ami, et vous serai très obligé si vous voudrez me
fournir quelques informations à ce sujet; à la suite de quoi M. Visiani
s'adressera directement aux personnes qui seraient disposées à accepter
la proposition, dans les voies que vous aurez la complaisance de vous
indiquer. — En attendant il me charge de vous témoigner son estimation
bien distinguée, ayant eu l'avantage de faire quoique pour peu d'instant
votre connaissance personnelle à l'occasion de votre premier voyage en
Europe. Il s'est proposé aussi de vous adresser un choix des dissertations
qu'il a publiées dans les derniers temps.

Mes collections de doubles de plantes illyriennes ayant été com-
plétées, je sais moi-même en cas d'en offrir, et il me sera très agréable
de répondre aux desirs que vous voudrez me faire connaître soit pour
vous comme pour vos Amis.

Vous m'avez prouvé le plaisir de posséder votre portrait, que
je conserve bien soigneusement avec les ouvrages que j'ai reçus par votre

amitié. Veuillez en échange, et jusqu'à ce que je puisse vous offrir autre chose
accepter celui qui est ci-joint en souvenir de votre bien desiré.

Répondez-moi toujours en anglais.

Ami M. Tommasini

Comme j'ai cepe d'appareillé à la Municipalité,

veuillez prendre note à dresse

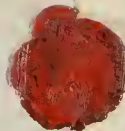
actuelle de la manière suivante:

à M. Mutius Tommasini

im. Souverain-Audique

Ami,

à Monsieur le Secrétaire
Professeur de Botanique
l'Université de Harvard
Massachusetts Cambridge
Etats Unis de l'Amérique Nord New York
en Nord



Mon cher Monsieur !

J'ai reçu il y a quelque temps par la poste votre très aimable lettre du 22 janvier d., et en ai appris avec beaucoup de plaisir, que je pourrai encore avoir occasion de vous offrir mes services dans ces contrées pour les objets qui appartiennent à la science botanique. - Je me serais bien empressé d'accomplir aussitôt vos souhaits par la remise des échantillons de plantes que vous avez notées dans mon catalogue comme désiderata. Mais pendant l'intervalle du temps qui s'est écoulé depuis l'envoi du catalogue, le nombre des espèces a été considérablement diminué, plusieurs d'elles ayant été épuisées en conséquence des commissions que m'en ont donné mes correspondants. Je préfère pourtant, plutôt que de faire un envoi imparfait, et qui ne répondit pas entièrement à vos attentes, à en remettre l'exécution à l'automne prochain, dans laquelle époque je compte de pouvoir vous envoyer non seulement ^{ou presque toutes} toutes les plantes que vous m'avez indiquées,

mais aussi plusieurs autres parmi les espèces plus rares et
intéressantes de notre pays, qui ne se trouvaient pas comprises
dans mon catalogue de 1843. pour que vous soyez en cas de
faire des distributions envers vos amis. Je tâcherais aussi d'y
joindre des plantes qui sont particulières à la garnie et
Carinthie, comme vous le desirez, ayant dans ces provinces
quelques amis qui pourraient m'en fournir. La saison de
la nouvelle récolte a d'ailleurs déjà commencé, et comme
je suis très occupé pour la collection des échantillons,
le temps me manque presque entièrement pour arranger
quelque expédition.

Ce petit délai vous mettra en situation de me faire
connaître tous vos desirs, si vous en avez à ajouter à
ceux exprimés dans votre lettre; je vous prierais en ce
cas seulement de m'en instruire pendant le courant
de l'été, pour que je puisse satisfaire à tout par l'envoi
que je me propose de vous adresser en Automne.

J'ai été pendant quelque temps en peine pour le sort

du premier volume de votre Flora de l'Amérique du
Nord, dont l'envoi était annoncé dans votre lettre,
sans indication du Navire ni du Capitaine. Heureuse-
ment il m'a été remis avant hier par le Capitaine Brydens
du Brick MaKon. Je suis infiniment sensible et reconnaîs-
sant à votre amitié, pour le don de cet ouvrage classique,
qui m'est très agréable et utile sous beaucoup de rapports.
Je souhaite d'être dans le cas de vous en offrir une bien
faible revanche de ma part, si jamais je parviendrais
à accomplir la Flora du littoral illyrique, pour la
quelle j'ai déjà rassemblé bon nombre de matériaux.

A Brisioletto, très reconnaissant à votre souvenir ami-
cal, me charge de vous présenter ses amitiés. — Veuillez bien,
mon cher Monsieur agréer l'assurance de la plus par-
faite considération et amitié.

De votre très dévoué
M. J. Tournaire

Monsieur

M. le Docteur Asa Gray

à remettre

à Messrs Wiley

Putnam

Libraires.

New York.

Torrey H.W.

My Dear Dr. Gray,

These are the rhymes
I tried to quote to you:

An inquisitive little Sparrow
Asked every man in Wales,
Why parrots had long noses,
And foxes had long tails.

Some said that foxes used their tails
In winter for a muff;
And that parrots' noses all were long
Because they all took snuff.

But the reason, it seems to me,
As perhaps it will seem to you,
Is this, — they once tried short ones,
But short ones wouldn't do.

Truly Yours, H.W. Torrey.

New York May 29/58

Dear Doctor

It seems as if you were trying "to heap coals of fire upon my head", to see if they will have the effect of warming me into thankfulness. For I have just received the kind present of your book - "How Plants Grow", when I have as yet not acknowledged the receipt of of the box of plants that you so kindly sent to me a few weeks ago. Many thanks, dear Doctor, for sending them to me. I have planted them, partly in our city yard to be removed at some future time, and a part I took up to Sweden's Landing. The pipe-vine has not started as yet, but, I hope that it

will soon. You must wait till I come to
Cambridge and then you shall see what good
your book will have done me.

If there is any plant that you
know to be a native of the Palisades that
you have not got in your garden, I would
be most happy to send it to you.

It is quite lonely now at home, for Mag
and Lize have gone to spend a week or
two at Princeton to rusticate.

Remember me with much love
to dear Mrs Gray.

Yours truly

H. C. Torrey

with so little trouble to him.
He sends us our love to
you & Jane -

The box you speak
of, came duly to hand.
I tho James told you this
before; but. I have had
my hands full of business.

I will let you know
shortly how Father gets
on -

Affectionately, &
with remembrances to Jane
I am, Yrs
M. Torrey.

trouble
you in the beginning
of this
I said
I am
much obliged
to you
very
much
about the Report
Father

Columbia College
March 6th -

Dear Sister-Fray

Father wishes me
to acknowledge the receipt
of yr note of March 3^d;
& to say, that - he feels
quite satisfied with yr
plans for the Report, &
would like to have matters
proceed in the manner
you propose. He wd

write to you about it; if
he is mustered strength
enough to do so. He is
very feeble today. He
has for the last 48 hours
subsisted mostly upon
cream, his doctor's wishing ^{him}
to try that. But he
finds that it does not
keep up his strength; &
now today at dinner he
began again with beef.

Father has done next-
to no botany this last five
weeks — his only attempt-
at it was looking over
a set of Parry's last lot
of Colorado plants — 100. This
bit of work was spread over
two days.

I know that Father
will feel glad to have this
Report matter settled. He
likes the Preface, & is glad
to have the thing done

Next Point he became a sincere Christian
under the Ministry of Rev W Medbourne
the Chaplain, late Bishop Mel, and has
ever since emphatically "advised the doctrine
of God our Saviour" by a most exemplary
and constant life

My brother in early life was
a great lover of fun and very merry, where
the grounds that with shortness the ins of
the winter, he played upon the simple
minded people, that then inhabited what
was known as "Greenwich Village" now in
the heart of the city. Keeping them always
well stirred up, not knowing the things
that would befall them, but still
never doing any to injure ^{the} a person
or property.

His memory is to be most
precious. For 7.5 years we walked side
side without a touch of affection, and I
felt his love as if a right hand.

With mine to you

Yours
W Toney

W T Gray
Cambridge Mass

Montreal N.Y.
March 30. 73

My dear Sir

My beloved brother John was
born in the City of New York, on Hanover Square
(Pearl Street) August 15. 1786

Our father's name was William

He was a native of Boston, born Sept 1. 1759,
& removed with his father (John) to Montreal, on the
enforcement of the "Boston Port Bill", closing the
port, because of its determined spirit of resistance
to British oppression. From there, at the age of
17 years, he, without the consent of his father,
and on the invitation of his uncle Major
Joshua Toney of a light infantry regiment of
regulars, joined that regiment on the retreat of
the army from New York, at White Plains, and
remained as first in Europe, and the 1st Scout,
with it until the close of the war. His father
shortly followed him, and became ^{its} Quarter Master.
Our father was married in 1791 at New York to
Margaret Pickels, who was his only wife

suspect it is one of the numerous forms
of *O. argentea* Nutt.

That Onion. No. 1. must be *A. reticulatum*. (see Hook. fl. Bor. Am.) but the bidentate processes of the carpels disappear almost entirely in the ripe fruit. It is what I have called *A. retic.* - but the Onions need a thorough overhauling.

Thurber waits your directions about Mr. H. Broun. You got his letter inclosed in one of my letters over. He needs an order from you. How much more of the work is there to be? I wish we had some such man here who would by all the costly books that I need & place them within my reach!

Yours ever,
J. Torrey

New York, July 17. 1855

My dear friend.

I wrote to you this morning from the Agency Office & promised that you should hear from me again when I had examined the rest of Suchley's plants.

No. 1. is *Obovia Canadensis* Moq. with the thecae more cristate than usual. I think No. 574 Wright 1849 is another form of the same species.

No. 2 has interested me very much, so that I have given it a thorough examination. There is nothing like it in my herbarium. It evidently belongs to the group of *Atriplicae*, that is to say the flowers are dichous & heteromorphous: but differs from *Atriplex* brief. of *Obovia* (the two genera that it is most like) in the female flower having a 3-fid sepalled calyx! I call them sepals, because they have the place

of texture, as well as the form of ordinary
sepals in this family. The bracts
of the fern. are as in Obione, & they
are united to the summit. They remain
membranaceous when the fruit is ripe.
The Stam. flowers too, have an unusual
calyx for Ob. or Atriplex. as you will
see by the specimens & by the sketches.
Exoni^a has an inconspicuous calyx in the
fern. fl. - So says Moquin.

Look at your specimens of No. 2. You
will find the fern. fl. hid away in the
axils of the leaves. What can we
do with the thing but ~~to~~ make a genus
of it? What say you? How will Cryptoc-
lepis or Cryptocalyx do for a name; or
Endolepis? Endocalyx? - Call the
species (if you approve of making it a
genus) after Sickle, or one of the
officers of the Expedition - but just
as you like.

Flowers monocious. Male, bracteate, in
~~glomerate~~ Cal. uncelate gamosepalous 5-lobed
the lobes protuberant & fleshy on the back
the apex attenuated & inflexed Stamens 5,
fil. subulate, short; anthers ^{oblong}, ~~anthers~~ large,
scarcely exerted. No rudiment of an ovary.
Fern. solitary, 2-bracteate; bracts ovate,
membranaceous, ^{inappendiculate} united to the summit forming
a compressed theca which encloses the flower.
Calyx of 3 distinct sepals. No stamens, or
staminodes. Ovary ovate: style 2, distinct
filiform, ~~very~~ slightly exerted: ovule erect.
Fruit an utricle, ovate compressed, enclosed
in the membranaceous theca. Seed ovate,
^{at the summit} reticulate. Embryo nearly annular, very
stender, ~~erect~~: radicle superior. - An
annual herb, with the aspect of Chenopodium
or Atriplex, with narrowly lanceolate en-
tire leaves. Male flowers in glomerate
spikes: female solitary & axillary.

No. 3 is an Atriplex - ^{more} ~~probably~~ an
Obione - I have just the same from
the Sweetwater. (Freimont, ⁶²1843). I rather

New York, Nov. 14th 1864

Dear Doctor -

I have been looking over my specimens of *Najas* since I came home. The *N. major* that you sent me resembles in all essential characters the European plant.

In my herbarium I find some notes & sketches made in 1847, while examining a *Nais* from the vicinity of Princeton - & another sent by Hale from Louisiana. I enclose them for your inspection. The one from near Princeton has one-celled anthers. I did not see these emerging from their tubular spathe. Endlicher describes the male flower as I found them in sketches No. I. In the female flower the spathe is attenuated at the summit so as to resemble a style, & is pointed with what look like 2-4 subulate stigmas - but the same characters are found in the male flower, except that the summit of the spathe is not attenuated. I have not seen the proper style of stigmas of *Najas*

over)

In a *Najas* from Dr Hale I found both
kinds of flowers, but the anthers are
loosened. I think we have more
than one species under *N. major* in the
U. States.

Jane is getting ready for a start at 12 o'clock to-day. She wrote to you yesterday - & I hope you received her letter in time to prevent your expecting her by the 8 AM. train. She will tell you all about family matters. I will follow her when you think it will do to spend two or three days with you.

Yesterday morning I found on the Palisades a patch of *Mitchella* in which the, sains of flowers had not only their ovaries united, but also their corollas. Is such a monstrosity common with you? Jane will hand you a little bottle containing some of these specimens that I collected.

Last evening, in arranging some *Asclepiad-*
aceae I found a note that I made ^{long ago} on
a specimen of *Asclepias variegata* (D. Hook. & G. Don).
It is not only the *A. ovalifolia* of Dru (D. Hook.), but
= *A. Variegata*, Carey.

I hope you are not at all discouraged
about the war. Grant is not so successful
as we hoped he would be - but, if he is
kept constantly & strongly reinforced, he will
wear out Lee. We must expect hard
service at the North ere the rebellion is thor-
oughly subdued. The South must be ut-
terly devastated, & before this is accomplished
many thousands of noble fellows must die
& our national debt greatly increased -
but this is the price we must pay for
the vast good to be accomplished.

Herb. is going off again, some time next
week. He can not fight, but he can do
valuable hospital service.

Give much love to your dear Jane,
With undiminished affection -



Yours ever -

John Torrey

to our friends abroad, after keeping
one for yourself & giving one to Brewster.

I send also several photographs - one
for yourself - another for Brewster - the
others to whom you please. Eliza will
send more in a few days, that you may
present them to such friends as we esteem -
or whose photographs are desired in return.

It is late & I must close - Give much
love to your dear Jane - & tell her that
I hope to tell her some long stories
about California when I return -

Ever affectionately yours

Wm. L. G. Ferry

New York. April 20th 1845

My dear friend

Maggie will have informed you, before
this reaches Cambridge, that the steamer
will not sail until Saturday - & that
she will go to Aspinwall & send her
passengers over the Railroad - as the
Nicaragua route is not to be used for
the present - This delay has enabled me to
make a more complete preparation for
my journey. -

I wrote to Wright ~~the~~
to come on here & have a talk with me,
as there was a steamer for Havanna to
sail a day or two after our vessel - but
he replies that he cannot get ready
so soon -

In a former letter I think I told you
that in the later boxes received from the
Smithsonian were various bundles of
plants that were transferred from the Na-
tional Institute. I don't know where
they came from to the Institute - but I think
that one of them may have been from
the Expl. Exped. Collections. I inclose

one of the tickets - which is perhaps a copy of Brackenridge's. The reference seems to be to a note book in which memoranda were made by the collector.

On the outside of the bundle is written Plants from ~~Borneo~~ Zanzibar - from Col. J. J. Albert to the National Institute - Some of the plants, however, are from Borneo & Madagascar. If they are from the Expl.-Exped. Herb. Some of them are omitted in your printed volume.

There is also a very nice collection (not numerous) from "New South Wales" - pretty certainly not collected by Pickering or Brackenridge - as the specimens are better preserved than any that I have seen from those gentlemen - except the Ferns of B.

I have taken a set for the Smithsonian & Duplicates, where there were any, for Columbia College and for you. The duplicate Cakes (numbered to correspond with Herb. Smithy,

If there I shall send to you, with the Smithsonian set (plus) beyond No. 44, of which I could not send duplicates. Now any of these that you can readily name - if it be only the genus, I wish you would send me a list of - except of the mounted ones - the names of which can be written on the sheets.

April 21st nearly 2nd! I have nearly completed my arrangements for leaving in the morning - It is necessary for me to be on board the steamer soon after breakfast, as I am to receive the U.S. funds. & keep them in sight until the vessel sails.

The parcel of Australian plants that I have made up for you contains a few copies of a little paper that I gave to the Lyceum of N. Hist. six months ago - of which was printed in December last - but I could not get the plates until a few days ago. Please distribute them

were familiar to me. Yet I ~~may~~ have a few
new species. I left San Fr. with my friends Fairle
& Agnew on the 20th inst. & reached Empire City in Nevada
on Friday night. We were cooped up in a stage, with 9 miles
& half a day outside nearly 24 hrs. riding over ugly places on
the mountains, with frightful charms at our feet - the
horses dashing at full speed. The drivers are said to be
unequaled. It was very startling at first - but we
got familiar with the danger. which is more apparent
than real. We spent Saturday at Empire - looking at
the Mills & botanizing - & we had a comfortable Sunday at
the Superintendent's house - where we were his guests. The
San Fr. proprietors of the Mills telegraphed that I was coming
with two friends - but the message was misinterpreted, & the
Supt. (Mr. MacDonald - a real English gentleman) understood that
Miss Agnew, & another young lady, whose name he could not
make out, were to accompany me. So he immediately telegraphed
back for a quantity of champagne! He was a little disap-
- pointed when three he travellers emerged from the stage!
We were in clover however, as the guests of the Co. The mine
officers have excellent quarters & good pay. Mr. MacDonald
drove us to Carson (4 m. off) twice on Sunday, where we
heard excellent Episcopal service - & Monday he took us,
in a splendid 4-horse wagon to the Quartz Mills at Dayton -
& then to the famous Mills of the Gould & Curry Co. (Costing
\$1,200,000! - near Virginia City -). On reaching the latter
place we found ourselves the guests of the Bank of California
- wh. has a branch here - This is the 8th day since we ar-
- rived in this wonderful town - wh. though greatly reduced since
last July, is still a very busy City of more than 5000 inhabitants
with long streets of handsome houses & stores, gas lights, &
every convenience & luxury to be found in San Fr. itself -
or even in N. York. But every thing is very dear - having
to be ~~carried~~ brought in wagons (which carry 4 to 7 tons - with 5 to 8
yoke of ~~oxen~~ or pairs of horses -) at a cost of 50 cts a ton, in summer & 8-10
in winter.

I have no time to read this letter over & beg you with excuse
all blunders

Virginia City, Nevada.
July 31st 1865

My dear friend

Although I have not written a line to you
since I reached the Pacific Coast, there has not been
a day that you have not been many times in
my thoughts. Oh how often have I wished for
your company, to share with me the pleasure I
have enjoyed in visiting this strange land! But
my time has been so constantly occupied in tra-
- velling, examining mines, visiting & receiving visits,
- collecting the numerous plants that came under
my notice (which, of course I could not resist pre-
- serving, both for myself & for others) that I have
never worked harder than since I landed at San
Francisco. I try & collect fine specimens of every
plant of the least interest - ~~of~~ which three are for
yourself, the Smithsonian & Herb. Torr. One, perhaps,
for the New Herb. & the 5th we will talk about.

I have visited the country from 10 to 150 miles
around San Francisco pretty thoroughly. Then I
went down the Coast to Sta Barbara Co. - the Secy
of the Treasry having kindly put the Revenue Steamer
Shubrick at my disposal. I was high admiral
of the expedition - & one or two gentlemen who wished to

accompany me furnished all kind of creature comforts for the voyage - & also for the land expeditions - so that I was at no expense whatever. The outfit of horses & wagons was quite formidable. Where the wagons could not be used (as on the steep mountain paths) they were sent a long distance round to the place where we intended to encamp. - They carried our shoes, blankets, provisions & cooking utensils. The Draining Packmen were excellent Cooks, & we had good living all the way. I got plants whenever we stopped, & not a few on the road - some one of the party would gladly dismount & bring such specimens as I pointed out, to be laid in the collecting book, which was slung over the shoulder by a strap. It was difficult to keep the papers & dry them - but I managed to get along - & the air is so free from moisture that in three or four days, all but the succulent specimens are dry. The bundles of papers that I am obliged to take with me are no slight "impedimenta" to our little party. My friends, Agnew, & Faile, of New York, who arrived a few days after me are by my side wherever I go. They are kind to me as if I were their father, & watch all my movements with the greatest solicitude. They are noble young Christian gentlemen. They went with me to the grand Yosemite valley, where I looked every hour for your son - Perry. Horace Mann (whom I had seen before in San Francisco) has probably reached Cambridge by this time) has probably told you how we met in the Yosemite, where he was

riding about & looking for the hotel. How glad I was
to have him with us three or four days. The first thing
that saw on the morning after our rest at the hotel, was
a little plant that you remember is occurring in the diff.
exp^l cell - a *Eubracon* - I gave the name of *Kelloggia*.
It is quite common in the valley, & also on the adjoining moun-
as well as in the Mariposa Grove of Big Trees. I have plen-
ty of specimens. The Calif. botanists did not know it. & Botani-
cal Soc. is sure that Brewer did not collect it. Those Big Trees
are worth a voyage & journey to see. I got specimens
of the wood - enough to frame your picture of mine.
- & a small bag of the fruit, that you have may
use some of them for setting of the corner of the
frame. To see the *Sarcodes* in situ was most gratify-
ing. Did Maggie write to you that the first plant that
I saw in S. Fr. the morning after my arrival, was this same
Sarcodes - which was in a drugist's show window - planted in a
flower pot? It was ticketed "Snow plant" from the Sierra Nevada
where it grows in close proximity to perpetual snow. This
was incorrect - for the plant grows very far below the
snow - even in the valley of Yosemite. I have plenty
of specimens, & have determined its mode of parasitism.
The *Libocedrus decurrens* grows all over the mountains
& replaces the *Thuja gigantea* & on the Southern Sierra
& Foot-hills. It is sometimes 8 or 10 feet in diameter.
A grand me paper through the kitchen roof of the Yosemite
Hotel - & my bed was under its shadow. Plants that
we have only bits or poor specimens of in our herbaria
are so common that I have rode through miles of them.
Until I crossed the Sierra, nearly all the plants that I saw

The alkaline water, of which there is such general complaint in Calif. & Nevada, don't trouble me at all, as I am seldom troubled with any ailment but a slight acidity when I eat too much sweet - so that the water keeps me all right -

I have taken only two professional jobs since I came here - Indeed only one - for the other was engaged before I left New York. For one of these I have been paid \$500 in gold - of wh. (50%) I shall save \$400. Agnew pays my expenses from San Fr. to Humboldt, & back - & will give me at least \$500, when I return to N.Y. He represents some stockholders of Mining shares - of friends in N.Y. I may get a little more from a branch of the Petroleum Co. owned in N.Y. whose lands I examined while I was in Sta Barbara - All other applications, I have declined, as I don't wish to run any risk of giving an opinion that will cause loss to Company or individuals - & I take warning by the case of Sullivan who has obtained throughout the country that I have visited, a very unenviable reputation - I must here close, as my friend Fells is waiting to take my letter - This mail being about to close. Give much love to your dear Jane - Yours ever & affectionately,
John Forney

I have been down in all the principal mines & have formed my opinion about their future - which as well as many other particulars about this town, I hope to relate to you when we meet - What would Fremont & Kit Carson have thought if it had been predicted when they discovered the Valley, at the head of wh. Virginia is situated, that they were told that in a few years a city would be established here, in which all the luxuries of the east would be plenty - that the houses would be elegantly furnished, carpeted with Brussels - lighted with gas - & champagne would be served up daily! Indeed all this has been done in about six years. It is a constant wonder to me. The town is built on a gentle slope at the foot of Mt. Davidson, wh. rises to the ht. of about 1,800 ft. or abt 8000 above the sea - At the upper margin of the town are most of the mines. They are situated in the famous "Comstock Lode" - which is a mile & a half in length - extending to Gold Hill which is but a suburb of Virg. City. As the Lode proved to be unprecedently rich, it was divided into numerous portions, of from 50 to 1,200 ft each - each portion made the basis of a Company - At one time the richest of these sold for \$5000 or more pr. foot - but within a year or two it has brought much less & at present it is sold at a little over \$1,500 pr. foot. All the mines have been badly managed, & the expenditures

upon them have been most reckless. The richest portions of ore were dug up & worked to great disadvantage, the managers being contented to get the cream of it & let the rest go. The Superintendents put up most costly machinery (elegantly finished) & expensive buildings - with fine mansions for themselves - keeping numerous horses & carriages & living like princes at the treasury of the Co. & receiving besides, from \$30,000, to \$60,000 per an. Most of the Companies are now contracting their works & reducing the salaries of their ^{still} officers - yet they receive \$8 to \$10,000. with a good house Carriage & horses - as well other odd & ends. I have been entertained by several of them & always in a handsome manner.

I should have returned by the Steamer of the 13th July, had I not made a promise to my friend Agnew, that I would go with him to Austin & Humboldt. He depended on my accompanying him & we are to set out on this rather hard journey tomorrow morning. As soon as we look at the mines there it is our purpose to return immediately to San Francisco - where I expect to take passage by the ^{of the 13th prox.} Oppokins line (on which I have a free passage & is a messenger of the Treasury) - or

by the Pacific Mail Co's line - which leaves on the 17th. I was told by some friends, when I left San Fr. for Virginia that they hoped to procure a free passage for me in the latter line. I would much prefer the Pacific Co. to the Opposition.

The Climate of Nevada is much like that of the Sacramento Valley of the Country east of Stockton - & similar also to that of Sta Barbara Co. - i.e. hot in the day & cool at night - but the extremes are by no means so great as at San Francisco - where one needs a blanket or two every night - & uses fires in summer ev'g. are not unpleasant. The heat tho' great is quite bearable, owing to the dryness of the air - & the fine rest that is enjoyed in the cool nights.

I have not been sick a day since I left home & it is strange to say I have seen the sun every day since I embarked at N.Y. On the 4th of July there were a few drops fell at San Fr. - but not enough to be confluent upon the sidewalk. In Sta Barb. Co. we had one shower that wet us a little as we were driving in a wagon - & three days ago it rained a little here - but not enough to lay the dust. I stand the travelling as well as my young friend, & have an excellent appetite. My diet is simple - & I get all that I wish in the matter of food,

Columbia College, Oct. 17th 1865

Dear friend

Yours of the 13th was received this morning. So you had already got hold of that little "Hokelia" as I thought it might be, but which you consider an *Iovelia*. I compared it with the latter genus (which, elsewhere I have given reasons for retaining in *Hokelia* - but it did not seem to belong there. Did you not find all your specimens to be pentandrous? I suppose that both your new species were found on high mountains

As to ^{the} Name, it seemed hardly to agree with the admitted species. - It has a short & solitary style, & the placentae are different. I did not see how it differed from *Scroph.*

Those letters are very interesting, & yet make us feel sad. To be sure good old Sir William had attained to an unusual age, but I thought he might be spared to us a few years longer. I trust that he was prepared for the great event.

Poor Dr. Hooker has been a great sufferer
of the cases of Kew will be almost too much
for him. They will, in any case, greatly
diminish the amount of work he could turn
out in other service. I sincerely hope that
he will not break down by prematurely assum-
ing his new duties.

When will the 2nd part of the Gen. Pl. be
published? I must have an early copy.

Strange to say I have not yet obtained
Part I. Vol. 15 of the Prodr. The later
volumes have been regularly sent me by
Veseyman - but he seems to have forgotten
this last, & I must order it at once.
When shall we have the rest of the Euphor-
biaceae.

After my last letter to you was written
I discovered my mistake about the box con-
taining those plants - but failed to correct
it. Jordan & Co. received the box, & sent
my share of it promptly to the College

Nov.

Oct. 30th. I have kept this letter on
hand too long, but, as usual, I was waiting
for time to write on some matters not yet
ready. -

I send a *Hydrophyllaceae* that was found
by me, only in the Yosemite Valley. It must
- I suppose, go into *Phacelia* - but the species
seems to be new. That *Nama*? from
Empire City (Nev.) is unlike any other spe-
cies of the genus, & is surely *Hydrophyllaceae*.
Is it not a species nearly allied to *Ph. arctica*?
The long style, divided only at the tip - the pla-
centae narrow & seated immediately on the valves
- so that the fruit is one celled &c. remove it
from *Nama*.

Yours ever - J. Torrey

the Smithsonian are glued also,
It takes much time to prepare
the specimens. None but an
experienced taxonomist can do such
work.

I have had to overhaul N. Am.
Hydris, in order to make up
my mind about a specimen ~~sent~~
from Lake Superior by Dr. Robbins.
I am convinced that Chapman
has made quite too many spec-
ies of this genus.

Yours ever
John Torrey

New York, March 21st
1866.

My Dear friend -

I tried hard, for two days,
- to write a few lines to you - but
there have been constant in-
terruptions. People break into
my room at the Survey Office, &
I shall have no escape from
my present annoyances, until we
remove (on the 1st of May next) into
our old quarters in Wall St. I had
to give up my private office
in this building, to make room for
the increase of Treasury business.
Your short & sweet letter was
on my table yesterday, & to-
day recd. the letter of Dr. Huxley
which you kindly forwarded for
my perusal. The Dr. is very
plain-spoken on our relations with

England, & of 'about our war - not
more so than are most of his
Countrymen - We must excuse
his prejudices - as he is a thoroughly
good fellow at heart - He sent
me his father's & his own photographs
- which I was very glad to get
for my Album - Soon I shall
send you a list of the botanists
whose own portraits I have already
obtained. Of some, none could ^{now} be
had, as they have passed away -
but we have then engraved &
other likenesses, - which can be
reduced by photography. I shall
get Joy to copy some of mine
- as he works on such matters
with his pupils -

Your notice of a new part
of St. Brail. reminded me of my
having neglected to send you what
I owed for the last two or three
pkins - Shall I remit a check

to you -? It may as well include
the cost of the last -

So you have Mann working
with you - & I am glad! He is
a careful & conscientious worker
& will learn much, while doing
service to you -

I hope your dear wife is
quite stout. - If she escapes colds
for a month longer, she will
get along the rest of the Spring
Give my love to her, & remem-
ber kindly to Mann -

The great box of plants was
long in reaching me. It was
not sent to the depot - but kept
on board the vessel - & I knew
not where it was, till the steamer
was about sailing. The contents
were highly acceptable. My
own portion has been glued down
- & is ready for distribution in the
Herb. & many of those for

July 5th 1866 - - Yours of the 2nd inst
was on my office table this morning.
Maggie & I returned from Artonia to-day.
I spend part of the 4th of all night there.
Our pyrotechnia display at Mr. Bennett's
was brilliant & the grounds were full of
people. At the house I saw & had a long
talk with, Rev. Joshua Leavitt, now an associate
editor of the Independent. We had not seen each
other for many years. Once we worked together in
the Temperance Cause. You must remember him.

Ray goes to Northampton. We may do something
with the Academy - I can decide, after the meeting
whether it will be advisable to retain our members
cheap. I should like to know what you
consider a sensible & democratic basis. Would
you advise an increase in the number of members
- or more popular meetings? Or a more liber-
al constitution from bylaws?

Good Dr. Hosken is walking in his father's ways.
& is truly a good fellow. So he has sent
you an autograph of Linnaeus! You know that
I have one, from the collection of the Elder Dufosse.

I am glad that you have heard from Rothrock.
My last letter from Ball talks that nothing had been
received from R. & other members of the Scientific
Corps. You will soon be receiving collections from
those high n.w. regions. Glad you have succeeded
in raising Heliothis from the seeds. Yours ever
J. T.

New York, July 4th 1866.

My dear friend -

I ought to have written to
you sooner, but have been waiting for some-
thing special to say, -

The notice of dear Dr. Greville's death
made me feel sad. We had kept
up a correspondence (interrupted for
the last few years) - since I was a stu-
dent of medicine! He was a truly good
man, & I doubt not is now in heaven.

The former parcel of plants, & the
present of a curio of beautiful bracket
from Sane, were acknowledged some days
ago. Another good parcel has arrived
since. You are too liberal - & get from
me very little in return.

Of course your boys are exploding gun-
powder just as ours are. They began last

of the noise steadily increased till I
fell asleep - which was waking toward
the small hours. When I awoke the
morning the rattling & cracking were still
louder - so that I presume there was no
cease all night! You know that I
have a fancy for these things, old as I
am. I am all alone in the

house. Jane, Eliza & Herbert are in the
country. & Maggie & I are to be at Ashmun
most of the day. She has already gone - but
I must attend first, the meeting off the
Cincinnati - where we old chaps will talk
about our deeds in the Revolution!

How is Mamma getting along? I think
he will do well when he gets use to the
harness. He has head & perseverance enough
but only experience will tell how as to his
efficiency

I have now got almost all the loose
collections of plants worked up & placed
in the herbarium. There are some odd
& such that you must help me to
name when you come this way.

What are your plans for the vacation?
I take it that you will not go to Waltham
- but I shall be greatly disap-
pointed not to meet you at Buffalo.

Eliza will be at home about a fortnight
some time in August. I have hardly yet
got her consent to go with me to Buffalo -
but she may yield.

We have now a comfortable room for
you & Jane in the College, with a conve-
nient bridge over the space between it
& our house. Do come & make us a
visit. Much love to Jane -
Yours ever

Thanks for the tickets. There is
a sufficiency of them. John Torrey

Expt. Exped (Wilkes) Oregon & Calif. Plants;
to Washington - with the understanding
that it should be returned to me for cor-
rection before being printed. This mss. con-
tained my only observations on many of
the plants - & I think that the Mo-
-notropaceae were on the unique list -

I found, at the Office, another letter of
yours - or rather some notes (with spec-
imens) of Calif. & Nevada plants - to which
I will give prompt attention this evening.
Tell Parry that I will write to him
tomorrow - With love to your good Jane
- I must here break off

Yours ever
John Torrey

New York, June 2nd 1868

My dear friend -

I returned from the South last
evening - in comfortable health, but
a little fatigued with so much rail-
road travelling - the latter part of it
night & day in the cars. It was
nearly as cold in Georgia as here - &
I had only two or three comfortable hot
days. You know how sensitive I am to
cold. I went chiefly to get the
benefit of a warm climate - as it seemed
as if the spring would never come to N.Y.
In order to pay my expenses on the journey -
I undertook, for the Secy. of the Treas. to
visit the Branch Mints of Charlotte, N.C.
& Dahlonega, Geo., & report on them. Con-
dition - giving at the same time my

opinion as to the utility of keeping up these establishments. I shall get more than enough to repay what I have spent. The Secty - whom I spent the evening with at the "Club," in Washington, last Saturday, said, that I must be sure of charge enough for my services.

I saw a great many plants that I had never seen before in a living state, & in their native soil - but the best localities were passed when I was in the cars - I know they would not stop to let me get out & gather some of these precious things - & so I did not ask them! At the ordinary stopping places, civilization - or rather agriculture, had ruined the botany - so I made but skim collections in the South.

- When we meet, I hope to give you some details of my trip, & what I saw in the botanical line - as well as my impressions of Southern life.

I found at the house a letter of yours - inquiring about Monotropaceae &c - but there was no time to get the information you desired before going down town to the office - as there was much business accumulated in my absence. The *Alexandromes* (which I proposed to call *Newberrya*) is noticed in my paper on *Ammobromes* - in a note. I saw a young *Monotropaceae* in the Bigbee Grove of Marfosa - with only young flower buds - which I took for a small *Persea* - & did not examine it; but I have a specimen of it, & will look it up when I get home - ^(wh. may be your new genus) & at the same time find the other plant that you want. Long ago I sent my Copy of Report on

U. S. Assay Office

New York, June 3rd 1868

My dear friend

I have ex^d that solitary specimen
from the U. S. Expl-Exped. on which you
founded the genus *Allotropa*. It was
a Pickingian specimen, consisting of a
stem, clothed with long linear lanceol. ~~leaves~~
scales - with a terminal raceme of some
three or four flower buds, & one partly ex-
panded flower, the latter used by me in
making a rather unsatisfactory analysis. &
by yourself when you concluded it was an
undescribed genus. I send you the rough
analysis. & the residue of the post mortem
examⁿ. The specimen itself is glued
down on a large sheet of the Smithsonian
Herb^m. & it wd afford you no additional
information. Whatever observations I made
- or that you made, & communicated to me,
must have been incorporated in my description.

in the Report-

^ Sent to Wilkes. & probably now in Prof.
Hewitt's hands.

I ex? the Monopacea that I
found in the Manifera Big- tree Grove.
- It is certainly Peropora. Anterior opening
by lateral slit. 2-horned on the back, & Cor.
monop. 5-cleft. There are only young flower buds

In my letter of yesterday I stated
that my remarks on Hemitomes are in
my paper on Ammobromus

It is strange that Allotropa has
not turned up a second time

I will now take up those Hydrophyll.
& let you have what conclusions I
have come to about them

It is now late in the afternoon - &
since I came down town this morning I
have been so occupied in putting up some
of my things that I can not write to Parry
by this mail - Yours ever
I. J.

I will write again this evening

Yours ever

Wm Jones

New York. June 12th 1868.

Dear Doctor - Yesterday, on account of the great cold storm, I remained at home, & today, at the Office. I find your letter of the 10th. & the parcel containing the Monstrops. & your plant, with your notes. Very sorry

I am that I did not get them yesterday. Since Herbert has left us, to live on his farm, I get nothing from the Office when I remain at home (as I do occasionally for a day) - & so I miss a mail. I am just going to start for home. I will at once set about the examination that you desire - but fear I shall be too late to help you. My answer will go by the morning train - as it will be mailed to night.

The 2nd Vol. of R. Br. has not yet
been received. When it comes, I will
exchange copies with you -

The N. Am. Lathyrus shall be sent
tomorrow -

That Amarant. of Sutch that, without
opening a flower I strangely took for
a Glaux, is a Polygnum. I thought
it might be Nuttall's P. Americanum
(Sen.) - but I sent to Durand for a fragment
of the original specimen - & he sent the whole
- which proves to be merely P. aversae &
may have got among Nuttall's plants by
accident. No other botanist has found
it - ~~ours~~ is quite different - & must be
a n. sp. I should like a bit of what you
think to be the same as Retz's - from
Mohave -

I recd from Bolander, more than a year
ago, that Hemiacarpha, & considered it as
a distinct species, which I named in my
Herb. H. macrolepis. It is not at all
the same as the little Trimbisylis that you

allude to. That is a true Trimbisylis, &
very near, if not the same, as a F. collected
by Wright in Pungo & Pofai Exp. at Omo-
tepec, Nicaragua, & named F. Vahlkii. But
it don't agree well with Kunth's amended
Description (from Vahl's spec^{ies}) - in ^{his} Enumerat.

As to Monardella I am not so sure.
At first I thought that the var. ^{of M. villosa} leptophylla
in acct of the long petals, & narrow elongated
tube of the corolla would make a good
species - but I have all intermediate
forms. M. Sheltoni & M. Sheltonii are
no good species - I have long regarded
them as only M. villosa

You are doubtless right in considering my var.
venosa of M. caudicaria, as M. Douglasii

Your var. ramuli - from Bolander belongs to the
same species - but the bracts are much smaller.

~~Whipple's~~ ~~Trimbisylis~~ plant seems to be clearly ~~Trimbisylis~~ ^{Trimbisylis}
say it - In Bot. Mex. Bound. the
M. villosa ~~leptophylla~~ ^{leptophylla} should have been put after
Lab. of M. ~~caudicaria~~ ^{caudicaria} / s. should have been put after
the ~~diagnosis~~ - & was not found in the Coll.

U. S. Assay Office

New York, Dec. 20th 1869

My dear Friend - I have been
so much occupied with business
connected with the recent afflictions
in our Office that I have neg-
lected attending ^{to} the payment of
your account. I now inclose
a money draft for \$38.45.

There is a fair prospect that our
salaries will be raised in this office.
Our friends at Washington encourage us
& the subject will soon come before
Congress. I must break off here
as I am interrupted by a visitor
& when he is gone I must be off.

Yours ever
John Torrey

John

L. Dec. 23 - When I wrote the note
on the other side I expected to go, in a few
minutes, to the P. Office, & get a money order
for you - but was detained at the office
by business growing out of the late distressing
case of embargoes that has made us all
huntsick. And every day since it occurred
I have had much to do, in the investigations
connected with that sad fall. It was
only this morning that I could get off at
the right hour to call & get the order -
It is here inclosed. When you draw the
money - say that it was to be paid to
your order - Please receipt the bill, &
I can get repaid promptly by the College
Treasurer.

Yours of the 21st came to hand yesterday.
This morning I packed all my *Erinops*, in a
box, which was at once dispatched, & is now
on its way to Cambridge. I overhauled
my specimens of the genus about a year ago,
& arranged them according to Bentham in D.C.

Some others came in subsequently, which I have
only partially studied - but only two or three of them
will be difficult to name. I don't believe the
number of species will be increased by future
acquisitions in this genus - but rather diminished -
We must endeavor to get them arranged in
more satisfactory sections. Those of Ben-
tham can be improved, & some others devised.
Here I must break off again - A
person has come in & will stay -

Yours ever - J. Torrey.

Columbia College, March 9th
1870

My dear friend - I have been so constantly occupied ~~your~~ since yours of the 5th was recd. that it was hardly possible for me to answer it sooner. The Secty. of the Treas. has given me a number of jobs to do for him - not as the kind of my duties as Asst. - I have been testing many samples of whisky in order to settle some important questions relating to the Internal Revenue. I fear that nothing will be allowed me for this work. Then I have some special work of my own on hand - for which I shall receive fair remuneration. After I get through with this extra work of the Govt. I shall have a clear understanding with the Secty. of Declines doing any more except as an expert.

I will send you No. 2. of our Bulletin of Nat. Club. - but I have not read it myself. It can never possess more than a local interest.

I found the same opinion of Watson that you express in your letter - He is a right good, hard-working, & zealous botanist. Did he tell you of a plan that some of us proposed - that he should

part up, & compile a list, with references
of all that have been done in N. Am. Botany
west of the Mississippi - or of the R. Mts. I think
will do it well - & no other person seems ready
to undertake it, Give him & Wright my
kind regards & best wishes.

I have told Maggie to go & see your photo-
graphs at Sarony's - for she is a better judge
than I am, & more art. She has the directions,
the number of your negative -

To day I received the Manuscript of *Leunwacaea*, &
a letter from the author. This is prompt answer to
the request that I made of him while making you a
visit in January!

I enclose a list of my autographs of foreign
botanists - but I may have omitted half a dozen
names. Any additions that you can make from your
duplicates will be very thankfully received.

I hope to return your *Hydrophyllis* soon. Oh how
I long to get rid of the miserable job, & work, as I
used to do, on the dead plants! Had I been willing to
be a candidate for the professorship of Chemistry in this
college some 14 yrs. ago. When the Trustees were almost
equally divided between two gentlemen, & neither seemed
likely to be chosen, I should have had ~~nothing~~ nearly

substantial leisure five months in the year - & light work
the rest of the time - with now - \$6000 salary! But
I had stood up for Schaffner - ^{when} there was little hope
of his election - & I did not wish to appear to be working
against him. I could have done as well as the suc-
cessful candidate - & my friends in the Board of Trustees
urged me to hand in my name.

Did you find any new *Eriger*, or *Pleurostachys* in
Watson's Collection? Palmer is back - & left
most of his plants on the Pacific Coast to come after
him. A large portion was to come by water
& he fears they were in the steamer that was
lately wrecked on the Coast of Lower Calif. He
saw the *Canotia* - & says it has white flowers.
- but he did not get *Aemulobroma* - although he
looked carefully for it.

Thursday We are all well at the College & send much love
to Jane. Maggie was to put a note to her in this letter
but she was hardly ready when I left home this morning.

Yours affectionately
John Torrey

"Don't fail to save for me, whenever you can, whatever will be of use in Herb. Torrey, - especially of N. American plants. I have more to say - but will reply to your former letter very soon. Hope that your dear Jane is improving in health. May give her my love. I have just been going on the picture of Mr. Robt. Gadd, in which you are both represented. You even I Torrey."

are so very great as they are in this tribe. You have had great advantages, in this large amount of original material that you have been able to compare. As my name being associated with yours in the authorship of the memoir, it would hardly be justified by the share I have taken in its preparation. It would have been sufficient to say that you had defused all my specimens, notes & sketches of structural details. Had I gone over the whole once more, & given my own views, before sending the collection to you, there would have been more propriety in prefixing the names of the "old form" to this article. By the way, while I was talking to the Secy & Treasr. last week, a Senator (whose name I forget) on my being introduced to him, said - "Is that Torrey & Gray?" On replying in the affirmative - He replied that he had used the Flors. & knew something about that!

The parcels that you have for me can be sent as soon as you please. I am ready to receive them.

New York, April 19th 1870

My dear friend

I returned last evening from Washington, having spent a little more than a week there, - of course, with Kewy, at the Smithsonian. We had a good meeting of the Academy. Many valuable papers were read; & a vote (nearly unanimous) was taken, to increase the number of members. The next meeting will be held the latter part of October - in Washington. The Acady. will soon receive the legacy of Prof. Bache - about \$42,000 - & some time afterwards, probably \$10,000 more. While I was there I received a fresh flower of *Darlingtonia*, from Thurber's specimen, & I had it drawn immediately by a young artist who is working at the Smithsonian. I was surprised to find scarcely anything to add or to alter in

Spaugh's figure of analyses. Of course we have now the colors of the floral envelopes, which were uncertain in the dried specimens. The sepals are yellowish green, & the petals purple, with conspicuous veins. This is the first flower, I believe, that has been obtained from a cultivated plant. How is your doing? At the Conservatory of the Agricult. Dept. Washington it is flourishing but shows no sign of flowering - so it is with Mr. Stapp & others. Miss Davis says that her specimen (the only one living) of the first set, is thriving!

I have at last got to work a little at Botany - having, as I hope, got rid of ~~making~~ investigations for the Treasury Dept.

The two sheets (uncorrected) of your Enig. paper are before me. You have done well in "sizing up" so many nominal species of the principal genera. As yet, however - we hardly know the true limits of species - where the differences produced by age & soil

New York, April 25 1870

Dear friend:

I received to-day your letter of the 22nd inst., also the box of Eriogonae Egypto-Nubian fl. plants, &c. &c. - besides the last proof of your admirable revision of Eriogonae - for all of which receive my thanks. This evening I have been looking over part of the Eriogons, & agree with you as far as I had gone. I was not my *E. mollissimum*^{an} ~~the~~ name than *E. lobosii*? But no matter. It is a small thing to talk about. I regarded it as quite new when I first got it.

I shall be very glad to get those Duplicata of Indian plants that you allude to. The box can come by freight. The Carriage is only about 50 or 75. from down town to the College. You shall have my Polemoniaceae - this week. Perhaps I can dispatch them tomorrow. The Hydrophylls shall follow ere long. I am working at botany now, after having been

Last Saturday I went home with Herbert. He is getting his place in good condition. He has sold all of his land except nine acres. The boy is flourishing, & walks about the place. Every day he drives to the station with his father, & often returns with him. His health is perfect.

Judge Parsons was here yesterday, & Dr. Chandler gave him a luncheon, at which all the faculty of Columbia were invited. I could not be present as my office duties prevented.

I send a list of my said photographs of foreign botanists. Some larger portraits of others are hung in the kitchen - but I would like to have them duplicated for my album. Send me your spare ones.

The money for the last part of H. Brail. is enclosed. Excuse my negligence for allowing it to be so long delayed. It had been laid aside for you - but I forgot to enclose it before -

I am nearly out of paper (white) again & Parry would like a quantity. I can't get now more than 10 reams - & I will see how much Parry wants. Perhaps Eaton & others with some. Will you order any for yourself before long?

Yours ever, John Torrey

Get some extra copies of Eriog. struck off for me - say 50 copies.

occupied in extra work for the government - such as examining lots of Whisky samples, nitre, metallic alloys, melados (concentrated & partially &? syrup of sugar cane,) &c. I am trying to get from the Secy. of the Treasury some little compensation for these services. Thus far I have received nothing from them; but Prof. Hewy is endeavoring to show them how unreasonable it is to get such work for nothing. The trouble is about the authority for paying me. There is no hope of our salaries being increased by the present Congress.

= So you, too, are to have a flowering Darlingtonia! I sent one to Hooker - but it was not in such good condition as I hoped to send it. I shall, however, get fresh plants in the autumn, & then he will be liberally supplied.

Did you get any new Inops. from Palmer? There is now scarcely a doubt that his choice collections were sent by the steamer that was wrecked on the Pacific Coast. The brave fellow is, by this time off again, to repeat his perilous journey - for he expected to start in a week after I left Washington. He had some narrow escapes last

summer. I did not urge his going this time for the risk & suffering of his last journey were great.

Judge Clinton is in town. A dear old soul he is. Full of fun as he can stick, but with a most solemn face. Maggie & he have jolly times. He is very desirous of seeing you. I showed him your new photograph - but he hardly recognized it. Maggie & Eliza say they will not see you till you shave! They are indignant & will tell Jane to have you put in the barber's hands at once. I had the picture framed, & will show it to the Bot. Club this evening!

= Did you see any thing of Prof. Boeck when he was in Boston? He had great attentions in New York & Washington. He was to stop a day or two here ~~before~~ before going East, but, instead of doing so, went another way - & made a visit to his friend DeBull. I intended to have been lecturing to friends in Boston & Cambridge.

= As to the photog. of the young Bot. Garden. I had, indeed, taken the two persons represented in it as yourself & Jane - the latter I could scarcely make out - but thought she was intended. I am sorry to be undeceived, but Alice is good too.

New York, May 20th 1870

Dear friend
Yours of the 10th has just come to hand. I must have about one third of the plants enumerated in Wright's lithographed catalogue - received directly from W. himself - but there are many in the collection that you sent me that are not in my herbarium. How am I to get their names? As to Griffiths' plants I may not be able to get them named at all! This is provoking - but I will have patience, & Hooker may be able to help me.

I am glad that you saw Dr. Boeck. He had a good time at New Haven - Mrs. Silliman (who was at our house last evening) was greatly pleased with him. The Darlingtonia, as I thought I had written to you - was sent to Hooker long enough ago to be in his hands now - If a person whom I depended on to forward

it had not been neglected of my wishes,
the plant would have flowered in New as
soon as it did here - Did I tell you

that a member of the Bot. Club (Mr. Brown)
had succeeded in making it flower? He
says it will stand our winter in the open
air. Let me have the books from

Martin's Liby. when it is convenient for you
to pack them. I think that I have

an incomplete copy of Drejer's Caricologia -
- but I will look & see its condition when
I go home. If I need the work I will
be glad to purchase it - if not too dear - The
money for the Martin's books shall be sent
in two or three days.

Sue Danwell (one of my nieces) sailed for
Europe yesterday. She is a very promising artist
& has already painted some good pictures. A lady
friend takes her out & will pay her expenses
in Italy for about a year!

Yours ever
John Looney

New York, May 21st 1870

My dear friend -

There is a pretty fair prospect of a kind of alliance being formed between the Cooper Institute of Columbia College & if the plan is adopted, the School of Mines will be extended in its objects, & become a School of Science. Many of the occupants of the Cooper building will go elsewhere, & a fire proof structure will be ready for our collections, including my Herbarium! At the meeting of Trustees on the 6th of June, some decided action will be taken. & I will inform you of the result.

Le Roy is working hard on those E. I. Collections, & laying out what we require for the Herbarium. The unknown - or rather unnamed specimens, that are only

numbered are to be laid aside for the present, & not glued. The collection contains many species that we had not previously.

So Parry has good news about the plants of Palmer that were supposed to be lost! I received from him this morning some flowers & buds of *Canotia*, & shall study them eagerly when I get home. You, I believe, will have some also. I hope to make a little article out of it for our Bulletin. I shall not guess yet what I think it will prove to be. Let me know the result of your examination.

There will probably be some other interesting plants in the parcels collected by Palmer. That brave chap is off again - but he will be free now, to choose some other region for his explorations. If Parry can get a letter to him in time -

Yours cordially, J. Torrey

We shall miss Gould, Gibbs & Agassiz -
- probably Pease also - Still I think
there will be a full attendance, & an
interesting meeting.

I write at the office, hastily, - & will
give you more botany in my next.
Much love to dear Jane; whom you
must keep quiet during the hot weather.

Parker & his daughters were greatly
pleased with Cambridge - They think your
dear wife is a charming person, & "very
beautiful". They were glad to have
see Ch. Olney also - but were disappoint-
ed in seeing the interesting object of
Providence, on account of a fierce storm.

Good Miss Smith, too, was indisposed, & they
did not see her.

Give my very kind regards to
Wright & Watson - } Yours ever
S. Torrey

New York, July 2nd 1870

My dear friend

Your letter of the parcels of
plants came in due time. Perry
was at the office yesterday - & wished
me to send his bundle to the Agric.
Dept. at Washington - which I shall
do. He sailed this morning for
England. I had so that an interview
with him, & I was so crowded at the
time with visitors & work, that I
said nothing to him about the paper.

I will, however, take the responsibility
of ordering 10 reams for him.
Twenty reams I shall need for
Columbia College. I don't
need any more.

I went to Easton last Tuesday.
& returned on Thursday. Had a
charming time with Parker &
his family. The Commencement
was the pleasantest that I ever
attended. The exercises were
above the average what I have ~~seen~~
in other Colleges. Catell (one of
my old pupils - & still not older
than your Pres. Elliot) has renovated
Lafayette. The dinner was,
(as usually - so they told me) provided
by the ladies of Easton, at their own
expense, & about forty charming
young ladies - the elite of the town,
waited on the tables. I made them
help me to only a little at a time

that they might serve me the of Heaven!
This is the plan that I urged many
years ago - for Princeton - but that
most excellent, but peculiar, old bachelor
- Dr. Maclean did not approve of it.
I am sure that Dr. Mc Cork would have
no objection to adopting the practice.

I have overhauled your plans, &
find most of them desirable for my
herbarium. Those from St. Petersburg
have not yet been collated.
Letters have been rec'd from Ruf. & Mary
Henry - they are both greatly improved
in health. Maggie & I are keeping
house at the College. Jane is at Flushing
& will visit elsewhere most of the sum-
-mer - so with Eliza; M. will probably
go with me to the Troy Meeting.

evening ago. The occasion was a Festival
on the unification of Italy. I was much
interested in the movement - especially as
it related to the welfare of a large class
of poor people in this great Babel.

Yours ever -
J. Torrey

Let me know at once your wishes respecting
the Darlingtonians -

U. S. Army Office
Nov. 7 or 1870

Dear friend - I found on my
table this morning yours of the 2nd, ^{or 4th} inst. -
As to that simple-leaved *Fraxinus*, I have
noticed it somewhere - I think in Brit. of
Inver Exped. - & I have it from other local-
ities if I mislate not. I have been suspici-
ous that it is an abnormal state of some
~~other~~ pinnate-leaved species. When I go
home I will look the matter up, & report
to you & Watson.

Often have I wondered what ~~De la~~ *De la*
was about in these days. When I saw him
many years ago. he was actively engaged in
the north guard - but I supposed that he
was now quite too old to do military duty.
The Parisians here, I fear, yet to suffer
more than ever - for they seem to have lost
their reason.

So Benthams has undertaken the Com-
position for this Gen. He will probably cut
& elate among them - but I hope he
will not make any unnecessary changes -
Nothing is gained by ~~putting~~ removing genera
~~to particular problems~~ making of them well-charac-
terized subgenera. It is almost a matter of
taste whether we call a group of species
a genus or a subgenus, but this change
may lead to an extensive change of specif-
ic names.

Send the box of "Indian & other plants"
as soon as you like, no matter how bulky
it is.

I have just received a box of Darlingtonia,
in fine condition. It came by
express on the Pacific R.R. My object
in getting it was to have the plant in
our leading gardens. The express charge
from Colfax was \$10.84. Now if you wish
half of them at cost, I will let Parry have
the rest on the same terms.

I gave Mr. Robinson a letter to Mr. Henry
of Lake City (a cousin of Miss Davis) - & he
writes to me from San Francisco - that he
spent a week at the Darlingtonia locality
& neighborhood - where he packed two
large boxes of the plant, & dispatched
them at once, directed to Kew. He says that
this lot will supply all the botanical gardens
of Europe! I shall expect his return in
a week or so.

I am glad that you are bringing along
some promising young botanists. You must
have some of them ready to take our
places. They will repay you for all the
labor you bestow on them.

I was very sorry that we were disappointed
in our expected visit of your good wife - but
you was ~~were~~ to get home of rest. Give her
my tone of sympathy. Take care that she
does not expose herself in bad weather.
Tell her that I heard Chas. Bruce make a
talk to about 250 Italian Children a few

the war is ended, it will not be
until some time in 1871!

I think, with you, that the plants
of *Darlingtonia* were not well pre-
pared. The roots were cut off too
short, & the suckers were not left
attached. Robinson wrote to me that
he packed my box himself. If
the new plants are like mine, Le Roy
says that not one of them in fifty
will live! This, if true, will be
a great misfortune. The gentleman
who put up my former lots. says he
will send more if I wish them. So
let us not be discouraged.

How about that parcel that you
had nearly ready?

Yours ever
John Torrey

New York, Nov. 18th 1870

Dear friend -

I thank you for sending
those letters for my perusal. They are
full of interesting matter. D.C. agrees
his views of quoting authorities with
much zeal & acuteness - but I think
our own views are more correct. There
are difficulties in both methods - but
I don't think the majority of botanists
will adopt the innovations proposed.

Bentham is a good soul. I feel
a strong affection for him. His opinion
of the French, agrees with ours - How
serious the prospects of Europe - in con-
- nection with the new demonstration of
Russia. Surely England will not be
mad as to rush into a war with

the great power of the North-

So all the Compositae are to be overhauled by Bentham! From what he has done in Veronicaceae & Eupatoriaceae, we may expect as great changes in the other groups. As there are few genera of several species that are sharply defined, it is easy find transitions from one genus to another, & in such a family as Compositae, we may consolidate to any extent, & show pretty good reasons for lumping a dozen or two genera into one.

I know that the constant discovery of new material shows that our generic characters must be modified, & in many ~~other~~ cases, the genera themselves must be given up. I hope that Bentham will not make any down head trials of some of our pets! How a single person can

in a year or two of study, dispose of a great family of plants, & make extensive changes throughout, - when even the study of a much smaller one - say like the Polemoniaceae which you have been working on, requires months of labor & study, I can not understand. It is said that

the elder De Caudolle worked almost unremittingly seven years, on the Compositae - & with the vast additions that have made to the family since that part of the Prodr. was published, it ought to date at least half of that time to revise the whole. If only one person is to do the job, I think Bentham is better qualified ~~than~~ than any other person to undertake it - unless it be yourself -

The letter of Eichler is good - but if he don't print any more H. Bras. until

- only a small part of them will live
- The most thrifty plants sent to me previously, had long suckers, each with a new plant at the extremity.

March 13th - Nothing new to-day. I am glad to learn from the newspapers that the Santo Domingo Commissioners will be here in about a fortnight.

Love to Jane. I hope she has recovered from the fatigue of the party. You, who must have spent some time & labor in preparing your rooms - The Bot. Club meets in the Herbarium, & gives me no little trouble to clear up the rooms, & put things right afterwards - Yours ever W. Loney -

New York March 11th 1891

My dear friend.

I need to-day your office & am glad to learn that the boxes from the Parker came in good condition to you.

Herbert & I took all the steps that seemed to be necessary in order that the boxes should be sent to you promptly & intact. They were crop & disobliging at the Custom House - probably in consequence of the searching inquiry ~~there~~ with their drugg that was in progress. The least that they would promise, was that care should be taken of the plants if inspected in N.Y. I hope, however, that they relented & concluded to trust the tricky Yankees. What a conscientious set of fellows we have in our Custom House!

As to those seeds that our appraiser valued at \$100, I wrote to my friend Knox (Dep. Comptroller of the Currency)

who has the care of the Seeds - & he
tried to get a free permit for them ~~sent~~ -
- but I suppose that Mr. Bartwell laid
the matter before Collector Murphy &
his Sub. Mr. Clinch, both of whom
happened to be in Washington at the
time. A new appraisement was ordered
- & they liberally cut down the estimate
of value to \$25! So you will have
to pay that sum, or leave the seeds
in the public store. .

The Labiatae arrived safely - & the
accompanying bundle of specimens
also. LeRoy is distributing them. Thanks
for all the good things that you send me.

Palmer is about starting for Arizona
as Indian Agent for the Pima & Maricopa
Indians. He will be stationed
on the Gila River, & promises to do all
he can for Botany.

Parry & Wright are probably very busy
in Santo Domingo. I hope they will
escape the voracity. What an absurd move-
ment that was - of sending Commissioners
a people still in a state but little advan-
ced from barbarism! I do sincerely
hope that their country will never be an-
nexed to ours.

So you have had a grand gathering
at the garden! I hope the labor of anxiety
in getting it up, has not been too much
for Jane. These things have to be done
occasionally, as society is now constituted.

We keep up our Thursday evening society.
I remain in the College until about nine
o'clock, & then join our friends of the family.

What success with your Darlingtonia?
I see that good plants of it sell for about
60 shillings in London - probably some of
the stock sent over by Mr. Robinson.

LeRoy persists in his opinion, that if
the specimens sent to Kew are like those
that I received - all put up by Mr. Robinson
himself.

pretty plainly. The only money-value that he knows
is "50 cents" - which he asked me to give him
that he might buy some bananas - of which
he is very fond - Much love to your dear daughter

Ever yours
J. Torrey

New York, March 24th 1891

Dear Doctor - I have just got at
work again after being confined to the house
(with occasional lucid intervals, which I
spent in the College) for nine days - Since
I returned from California I have almost
entirely escaped my my Spring Influenza;
- until the present March. I am now
gaining strength rapidly. We have all
had colds - & they seem to have prevailed
generally, for the last three weeks -

Do you know Prof. Wood of Philadelphia?
For a number of years he has spent much
time of labor in the study of N. Am. Fresh-water
Algae - but he finds that his medical practice
has increased so much, that he has resolved
to give up this specialty. He has sent
all his manuscript descriptions (with figures
of many species) to the Smithsonian Instn.

The material is not in very good order, but it shows, that the author has studied his subject with great patience, & zeal. Prof. Henry has sent this MS. to Dr. Barnard & myself to look over. There are about 300 16-to pages of it! If rewritten, & a little better digested, it would make a good Manual on the subject, & be very acceptable to our botanists.

Watson will soon begin to work in earnest on his Index for Western Plants. He has secured enough money to pay for his labor, & some incidental expenses. You know that Prof. Henry will print the book.

I believe you have heard of Mr. J. J. Crooke of this city. He is a bachelor, in a thriving & profitable business, & is a zealous amateur botanist. He is a friend of Dr. Barnstead, who, I think, persuaded him to purchase LeRays Herbar. He lives on Staten Id. & has just finished a fire proof building to receive it. I have some hope that he will get put one up for me!

He is purchasing books - & does not mind the price. He inquired how he could obtain your monog. of Polemoniaceae &c. Gray sent him a copy. I have supplied him with the Encyf. - Le Roy, too is modestly asking the same questions!

March 25 - At the Office - A person called to inquire whether I had heard from Washington about that package of seeds for your Bot. Garden. I told him that I had written to you on the subject - & the answer was, that the appraised value of the seeds was reduced from \$100, to \$25. This result I communicated to you, with my opinion that no further reduction would be made. If you think that the seeds are worth the money, just authorize your agent to "call at the Capt's Office"

Have you read Buckleys Remarks on your criticism upon his new plants? You will have to reply to him? Proceed - Acad. N. S. Phil. Sept-Decr 1870.

all getting better at the house. Herbert & Co. were here this morning. & I vaccinated his wife, boy & ~~daughter~~ nurse. The little fellows begin to talk

Many of the poor genera are dispatched as
briefly ~~as~~ if they were brought before a
kind of Botanical Court-martial - or
rather a Drum-head court.

The two copies of your Contrib. (containing
Plemon. &c.) have been received, & will be
delivered to the persons for whom they were asked.

Have you Blume's Museum &c. - or can
you tell me how much of the second vol. was
published. My copy (lately purchased) ends
with the No. pub. in July 1856. I find no
quotation of that work, of a later date - &
yet Bl. lived several years after 1856 - & even
published his Ochid. two or three years later.

I want to get the work bound - & if
there is not more than I find in my
copy - I will send it to the binder
with a new title page & index

I have not heard from Parry since his return.
It seems that he has all of Wright's L. Dom.
plants, as well as his own - & it is under-
stood that you will have the bulk of this Collection
- altho' they are not very bulky. Yours ever
J. R. Sargent

New York, April 1st 1871

My dear friend -

Wright made his appearance
at the Assay Office about noon to-day - he
came directly from the Tennessee - which
has been ever since the Santo Domingo Com-
missioners were landed at Charleston - in
reaching New York! She had expended all her
Coal - & was unable to get up from the
Quarantine to the city. He was quite discom-
forted with the ship, & with the miserable quar-
ters - a rather filthy den that they put him
in - it being the very worst in the whole vessel.
Herbert took him out to dine & I, although he
would take nothing but plain breakfast - said
it was the best dinner that he had eaten since
he left for S. Dom. This afternoon the good
man (I do like him) - left for Westchester.
It will probably be some days before he
goes to Cambridge - for his wardrobe needs
replenishing, & he wishes to attend to some
matters at home

I had another letter party written to you, but it has got mixed - Yours of
March 28th contains some remarks about Wood's (White's) Algae, that seem with my
view - & I wrote to Prof. Henny. That the note must be revised, & now a clean copy prepared
for the printer, if the Smithsonian Society should wish it.

Herbert has been spending some days
in visiting friends in & near the city.
The boy is in fine condition (2 yrs. & 2
months old). Yesterday ~~we~~^I spent several
hours in taking him to the Central Park.
He was greatly pleased with the animals
& it was interesting to find what he
thought of them. He could only compare
them with the creatures that he knew
about his father's place - & what he had
seen in his drives. The elephant was
a puzzle - It was neither cow, horse, nor
pig. The Camel ~~the~~ thought was a
kind of horse. The rhinoceros was lying
down, & he worked the brute to get up - for
he was evidently in great doubt as to his
nature. The swans were, of course
large ducks or geese - but the cranes
were neither ducks nor chickens. The
monkeys were what he was most desirous
of seeing, & was somewhat prepared for
making their acquaintance by what he
had been told of them at home.

How does your new green house proceed?
I suppose it takes much of your time to
superintend it.

I received Bentham's valuable letter. It
is disheartening to come to the conclusion, that
our most painstaking work is pretty certain
to be demolished by some of our contemporaries.
I hope that no botanist will
hereafter be so presumptuous as to make
a new genus of Compositae, for there is
not an undescribed plant of that family
that cannot be squeezed into some existing
genus! Indeed that same may be said
of almost any other family. If there is
to be this overhauling & smothering every few
years, botany will be looked on as one of the
most uncertain departments of natural history.

I still am of the opinion expressed in a
recent letter to you: that if a great reform
is needed in such a group as the Compositae
no botanist - whatever his advantages may
be, can effect it in the time that our good
& indefatigable friend Bentham can give to it.

~~For~~ the ~~series~~ stamens are apparently in a
double series, (somewhat displaced forward
of room) ^{the inner vertical} alternating with ^{the outer} ~~each other~~ -
& so reversing the position of the sepals
in regard to the carpels, from what they
are in *Darlingtonia*.

New York, April 15th
1871

My dear friend.

The parcel of plants arrived promptly,
and are already laid out for gluing. Many thanks
for remembering me when you have duplicates,
So you have Brewer with you - working on his
California Flora. Give my kind regards to him.

You probably know that Watson is in Washington,
superintending the printing of his Report. He will
not work on the Index of Canadian Plants, until the
the Report is quite printed.

Has Wright returned? He was uncertain how
long he might tarry at Watkingsfield.

Lewis R. Gibbs of Charleston has been
spending the week in this city, & I have
shown him my *Herb.*, *School of Mines* &c. Poor
fellow he has lost all that he possessed of world-
-ly good, & receives only a small portion of his
salary. He has a large family, & it is with
great difficulty he can support them in a very plain
manner.

Dr. Gibbs has just been spending a half hour at the Office. He has told me of the great changes recently made in the Department of Chemistry by the Corporation of Harvard. Look out - he is ready to go back to the andria, & the gynia!

Agassiz, it seems, will attend the meeting of the Academy. I am glad that he is able to do even so much.

It is my purpose to take Maggie with me to Washington next Monday. She has not been there for many years - & I think that she received benefit from her visit.

What progress are you making in your new building? I hope to see it before the summer is over.

Can I get another copy of your photograph of the garden & herbarium? I wrote it to hang in the Botanical Room of Columbia College.

I wrote to Bolander for a prod of Pickeringia - but has never seen one, although he had examined the plant at various seasons & in several places.

Give my love to your dear James. He is all right at the College. Herb. & Co. the same. Ever yours,
J. Torrey

Mem. for Dr. Gray

Flora Japonica. In my copy the text ends abruptly at the bottom of page 44 of the "Centuria altera" Pritzl in his Thesaurus, says ("Continuabitur [Opt. Zuccarini] 18. Feb 1848" in fasciculis quingis tabularum")

Miquel, in Prodr. Fl. Jap. quotes plates 128 to 136. "ined." - all of them Coniferae. Has any part of the Fl. Jap. been published beyond page 44 of the Cent. alt.?

I have been reexamining the flower of Darlingtonia - to see whether Sprague was right in his analysis. The be quite sure I mistook somewhat the specimen that Thunberg gave me, which had been preserved in alcohol. Sprague is clearly right, & his plan of the flower is what we ought, from theoretical considerations, to have expected. The stamens are evidently in a single series, & the regular number seems to be 15, - sometimes 16 - at other times only 13 or 14. Assuming this normal number to be 5, ^{each one} multiplied by collateral chorism to 3. Their place will be alternate with the carpels - & alternate also with the sepals. In Sarracenia

The stems are 2-4 jointed & are mostly one (sometimes 3)
flowered. No leaves were found. Without the male
flowers the genus can not certainly be determined. I un-
derstand that Mr. Peck has sent the plant
to Engelmann - who will report on it in due
time.

Nov. 7 to

I am waiting for my chance to get away.
- Mrs. Hewy & Carrie are with us still - but they
may get off this afternoon - Mrs. H. suffers much,
especially when the weather is damp, or the
wind easterly. We are trying to detain her - as
she is quite poorly to-day. I will let you
know a day or two before I go to Cambridge
 Hoping to see you soon. & with love to Jane -
Ever yours -

John Loomy

New York, Nov. 6th 1871

Dear friend. I recd this afternoon yours
of the 4th. & last week the package of Grapes
came to hand - for both of which I thank you.
What lots of duplicates of many of the
specimens! I have, also, the parcel
of Fl. Brasil. & am now able to bind
five more volumes of that work. Please
return the bill receipted - if the money reaches
you safely! Tell Brewer that I
am working on his Pigweed &c

Parry came to the house this morning -
- He brought his wife to Williamsburg - to
see what will be done in his case. Prof
Hewy left for Washington on Saturday. I
showed him the letter that you sent last
week - & he agrees to your plan - which
was, essentially, what I proposed to him -
myself. He will call on the Commis-
-er & have a plain talk with him. Parry
has written nothing against ~~the~~ Mr. Wally.
I have not even seen the article in
the "Hearts of Home". It is very desirable
that he should be restored - because he is

better qualified to serve in the Agric. Dept.
than in Japan. He left matters in such
a state that no one but himself can set
them straight. The Collection was about
being removed to another place - & many
hundreds of plants were in a state of prepara-
tion for the herbarium. A new man
coming in - especially if it were that
incompetent gardener who went with the
Santo Domingo Exped. (i.e. who, Parry thinks,
has had much to do with his removal)
might do a great deal of harm.

Palmer was here last week - & knows
much about what was going on in the
Dept. & he could enlighten the Comtee.
about a son of Sanders who has a Green-
house near Washington. & gets help from
the Collection in the Agric. grounds.

Glover fights the Chief Clerk - for
he is so important a man of cases
so little about keeping his place, that
he can say & do what he pleases.

Well - we must wait until we
hear from Henry before we take any

further measures. If ~~they~~ he is successful
we shall have but little more trouble.
Parry would go back, to be employed un-
til he got the Collection of his Dept.
in order - which would take two or three
months - & in the mean time there may
be some action by Congress that may
be favorable to our plan.

Mrs. Capron dined & spent the evening
at our house last week - meeting there all
the Hewys except Mary. Mrs. H. &
Carrie - & probably Helen, will return
to Washington tomorrow - on the next day.

What is the price of Heer. Fl. Exp?
If not too dear I will take it for the
Bot. Libry.

We had a full meeting of the
Bot. Club last Tuesday Evg. - Wood
was here & brought some specimens of
of what he thought was an *Arceuthobium*
wh. he recd. from Chas. D. Peck of Albany -
"It was found growing on the branches of
some small Starved Spruce trees (*Abies nigra*)
Renss. Co. N.Y." Only female plants were found.

Those "Exploring Exped." plants, of
which I spoke to you, are packed up
& will be sent to you by Express to-
morrow. Of a few, there are no
duplicates, & you can return them
when convenient. Any of these
plants that you name - at least
approximately - will be made much
more valuable to me if you will fur-
nish them with tickets. I will
try & find out, through Prof. David,
who was the collector.

I had a good visit to your house.
but I am afraid that I consumed
much of your valuable time. Give
my love to Jane - & remember me kindly
to Mewer & Hillebrand

I had nearly forgotten to say, that the
bundle prepared for you contains a few Engrs. for
Wilkes' Exped. - & some of Cooper's plants from
Bermuda - or the Bahamas - I forget which.
Yours ever J. Torrey

Columbia College
Dec. 1, 1871.

Dear friend -

I had a short & pleasant
ride to Providence. Almost two
nephews were at the station, waiting
for me, & took me to their uncle's in
hard some style. The good old chap
gave me a hearty welcome - &
we talked Caricography until
bedtime. He has a young draughts-
man from Troy working for him,
at \$6 pr. day - drawing splendid
parts of easy W. Am. Coar. - but
you know all about that. Miss
Smith is an excellent old lady - I
seemed very glad to see me. I
saw Dr. & Mrs. Caswell in their
own Church - & made them a call
on Monday morning. I was at home

on ~~Thursday~~ ^{Tuesday} - in time for a late
dinner. The next day I found
all night at the Office - but we
had to work hard to clear up for
Thanksgiving. I did not go
out the whole ^{of} day - as it was very
cold & the wind blew a gale. Winter
has come upon us suddenly - & I
had just time to make my visit to you!

To day I had a call from Mr. Crooke. He said that the letter of Meisner made him feel sad - that so excellent a man should find it necessary to part with his herbarium! He thought it would be wrong to take it from him - & might be the cause of his death - but that something might be done for his benefit. I suggested that, perhaps Meisner might be willing to dispose of a part of his collection - such as those portions of it that had

been kept distinct - besides some of the
 order that would be especially useful to
 N. Amer. botanists. He said that if
 this could be done, he would \$2,500 for
 what M. would spare, - & they would be
 given to the Herb. of Columbia College -
 - only asking to ^{have} put into his own collection
 what we did not want. He wished me
 to consult you on the subject. I think
 that at some future time he might
 purchase the remainder of the collection.
 Croke is a most liberal & modest
 man.

I inclose \$25 - which, I believe
is almost exactly what you paid for
the Bill of Exchange sent to Weigel.

I will ^{take} Keen's Fl. Fopitini Arcticia
- & let Newberry have it, if he denies the
work. He has gone home sick.

I will send the money first if you are certain of the amount

New York, Jan. 5th 1872

My dear friend -

I received, to-day a copy of your article on Dr Parry, & wonder at its mild tone! But you were wise in treating the subject so dispassionately. What business ~~that~~ had that poor old man to tell Prof. Henry that Parry addressed a letter ^{to} him, & signed it "yours officially" when it was obviously meant for some other person? And in his letter to you to say that it was "intended for impertinence"? The impertinence was on his own part. Then, too, what are those sins of Parry that he had refrained, from kindness to the Doctor, to divulge? -

Now, I suppose none will withhold any criticisms, that he may desire to make.

on the acts & writings of this Sage
of the Agricultural Department. It
is obvious that had Parry been restored,
he would, ere this, have been dignified
a second time -

Schott has again written to me an
urgent request that I would recommend him
to the place vacated by Parry. But the
reasons for refusing him a testimonial are
still as strong as ever. I am sorry for
the poor man, but in this matter I cannot
help him.

Why don't Clarence King let Watson
send me the plants that have been selected
for Herb Torr.?

I enclose you will find \$4 - the amount
still due on Henri St. Jof. I paid Hodges
\$5 that he advanced for the Custom House
parcel. Let me know if there be any
other sum charged to me -

Eugelmann is still working on our Loranthe,
He has sent me a nice little collection of
Limonaceae, named by Hegelmair - mostly
from the Lakes about the City of Mexico -

I hope you had a good time at New-
Year: but you don't make much of the day
in New England. I was able to visit
most of my old friends - We all wish
you & Dear Jane a happy New Year - al-
- though a little after date - Give my kind
regards & good wishes to Watson, & to
Margaret also if he is with you -

Ever cordially your friend
John Torrey

am
New York, Jan'y 9th 1872

My dear friend

I have just seen Mr. Crooke. & have had a talk with him about Meisner's Herbarium. He will do this. Advance \$2,500, & make provision in his will for \$2,500 more - but if he should survive Meisner, then he would pay the remaining sum & take the whole Collection for Columbia College. If Meisner could spare some portions of the Collection, especially such families as he has studied & will probably not take up again - so much the better. Of course such papers will be drawn & signed as will make sure the contract to both parties. - This, I think, is a plan that will do all that Meisner wishes. I will

return you his letter when Crooke calls
again.

Your ever

S. Loney

New York, Jan^y 10th 1872

Dear Doctor

I have the 3rd part Vol. I. of the Botany of the Novara ("Wien 1870") containing the Fungi, Hepaticae & Musci - & commencing with page 133. - Do you propose this work? What do the first two parts contain & how much Botany will the whole work embrace? - How shall I order the rest of it - or at least the remainder of Vol. I.? Winterthur is so dear, that, whenever a cheaper source is known, I order from thence. Have you a correspondent in Vienna?

I have sent for vol. II. of Fl. pop. Arctica from Wurster & Co. Winterthur, according to your advice.

Do you think that the genus *Obione* can stand? Hooker & Bentham do not adopt it. I find the direction of the racicle inconstant.

I suppose that you agree with them, as indicated in Manual

Shall we ever get the names of Burchell's
Brazil Plants?

When is *Ardisandra* Hook. f. published?

Or, then any probability of getting Griffiths's 2. Ind
plants named.. from the number on his specimens?

New York, Jan'y. 16th 1872

Dear friend -

Mr. Crooke called on me to-day to inquire whether I had heard from you since I wrote about his last proposition. He wishes to know ~~what~~ you think of it.

He thinks it would be well for Bunsched (who is now in Europe) to visit good old Treisner & talk with him about the Herbarium so as to report to us what we could not learn so well by corresponding with the venerable botanist.

Tell Watson I have received his book at last, & am using it every day. I wrote to Gen. Humphreys, asking ^{him} to let W. send me the set of plants intended for Herb. Torr. As Kery is absent, I do not wish to wait until his return. For what is all ready & only kept for want of orders - W. ought not to let the Agn. Dept. have a set until a botanist whom Prof. Henry or those whom he may consult, approve of his appointment.

Have you seen any recent criticisms on the doing of the new Commissioners? I think that

his treatment of several of the Professor when he was Prof of the Penn. Agricultural College, ought to be exposed.

— Jan'y. 19th. I have been waiting to see Crooke before writing to you. He was at the College yesterday, when I was at the Office. I will get his plan about Meisner, & ~~state~~ it to you specifically. But I may not see him this week, as he does not come in town every Day.

Schott keeps writing about the vacant place in the Agri. Dept. & wonders, now that there is no hope of Pang's restoration - why we cannot say what we think of his qualifications for the office.

I told him that I had resolved to have no communication with the Dept. while Watts held his place there. I told him (Prof. H.) that he had the nomination of the Candidate, & if from what I have said about Schott, & what he has heard of his character & attainments, he could present him to Mr. Watts & ask his appointment.

I send you a sprig & fruit of *Dicoria*, also fruit of *Asmorrhiza brachypoda*.

Yours ever
J. Torrey

from Le Conte, & Cady distributed it in his Florida Collections. How could Elliott have sent it to Hooker, & omit it in his Flora? I collected about 50 species - more as keepsakes, than for their rarity. I will send you a set of them in a few days. We went up the St. Johns River as far as "Enterprize" - a small place, - consisting of half a dozen houses, & a tolerable hotel. Here we spent several days - & there was good botanizing close at hand. There were plenty of alligators in the river. A German merchant of N.Y. erected a large of Landrum house near Enterprize, that he might have a place of his own for a winter retreat. He was very kind to us, & drove us in his nice carriage about the country - proposing us to spend a week or two with him. Here we saw whole forests of palmettos, some of them 60 ft. high. Going down the river, we stopped at several

places, & reached Jacksonville, where we spent a Sunday, & several other days. Here I began to feel when the thermometer was 84° in the shade - Then we went to Tallahassee - where the Saw Grass monument is the first of the Church. - Next went to Ocala - to Ocala - for 2 or 3 days - & so slowly home - Found eggs then - magpie gave a saloon N.Y. will come about meisen of Cook in my next - very busy Lane - J. Honey

My dear friend

I returned from the South on Saturday eve. last - in fine health & spirits - but I was not sick when I left home! To be sure I was glad enough to avoid the disagreeable month of March; & it so happened that I did escape an unusually severe spell of cold weather. We embarked in a heavy snow-storm, but remained most of the first night at the wharf. The change from severe winter weather to the summer temperature of Florida was very great - Our first Sunday in St. Augustine was more like what we have in June. The windows & doors were open, & the ladies used their fans. All the ordinary garden flowers were in perfection, &

New York, April 9th 1872

most of the trees were no full leaf. What struck me as most interesting was the number of large Magnolia (grandiflora) with dense shining foliage, & the palmettos, & Date palms. Of the latter there were two large trees in Dr. Bronson's garden: mas & fem. -- in flower. St. Augustine is a queer old town: but you know all about it.

At Charleston I saw Gibbs, & his family. His wife & daughter are bright & pleasant. In going to Savannah by the Cars, we passed through a miserable swampy region, overgrown with the "Saw-Palmetto", Small Cane, & pine trees. In this trip we saw the first flowers of the "Jeffersonia" -- & it was in sight almost every day afterwards, until we returned to Savannah. You know, perhaps, that I had Hubert's wife with me. Maggie found that she was not

strong enough to bear the journey, & Mr. Cooke then insisted that Louise should take her place. He had previously handed me a check for \$500. to pay travelling expenses! Is he not a splendid soul? Louise was greatly delighted to go, & was most kind of attention to me. We found friends & acquaintances every where.

At St. Augustine I botanized when opportunities occurred -- but it rained several days, & there were very few places suitable for my objects. The woods were overflowed (to a very unusual extent) -- & I found plants only along some dry places. The season was greatly in advance of ours at home. For example - *Mitchella* was in flower. I found only one plant in Florida, that was not described in Chapman's Southern Flora -- viz. *Satureia? rigida*. It is not uncommon around St. Augustine, & on the upper St. Johns. You know that I had it

New York, April 18th
1872

Dear Doctor -

Yesterday we received the parcels from you & Meehan. You must thank Mr Ward (my nephew) for the trouble he has taken to get them. I wrote a note to our Collector, explaining to him the facts in the case, & asking for a free Order - which he kindly gave. There were some formalities to go through - & to make two trips to Brooklyn.

Both parcels were in one cover; but I separated them, & in half an hour they will be in the Express Office. The only expenses were 75 cents. I hope there will be duplicates of some of the specimens, & that I shall

get a share of them

Mr. Crooke was in my office yesterday - & we arranged the business in relation to the Meisner Herbarium. He will send, in a few days, \$3,000 to M. - & perhaps the whole \$5,000, receiving from the good man a statement, that any portion of the Herbar. that may be retained, shall ultimately be sent to Columbia College.

We have concluded to keep this Collection separate from the general Herbar. of the college, & to have it known as the Meisner Herbarium. I proposed to Mr. Crooke to have his name associated with M's - but he objects.

Have you a copy of Weigel's Catalogue of Botanical Books - ~~from which I made~~ - the one from which I made a selection? My copy has been mislaid, & I cannot put my hand on it. The books that I

marked to be purchased, were partly for Mr Crooke, & the rest for Columbia College. Weigel has obtained all but two of them, & has sent me a bill for the whole. The numbers are given in his bill, but I can not tell, without the Catalogue, which are for him, & which for the College. The former are liable to duty, & I wish Weigel to make out a separate bill to include them. If you have one of the Catalogues lend it to me - for I have the money to pay for all the books. — They must be having a thin meeting of the National Academy at Washington. I don't know ~~how~~ a single member of our New York set who has gone.

Maggie has returned from Salem, N. J., much improved in health; & I am lively & working. Much love to your dear Jane, who, I hope is getting strong again.

Yours ever
J. Torrey

U. S. Army Office

Oct. 1872

My dear friend -

I meant to have written
you a long letter to-day - but have
been prevented by office work, &
several prolonged calls - It is late
& I must be brief.

The parcel of New Distub. came
to hand last evg. - I gave a cursory
exam.ⁿ of them. I think there are
many desirable for Herb. Torr. - Thanks
for your kind remembrance of me.

When I was in California, Bland
gave me some specimens of his
later Collections - among which are
some choice plants. I was greatly
pleased with splendid specimens of you

Prunella subcaulescens ! A Martin-
Caric, as it seems to be (for I have
not ex? it carefully). can had hardly
be either of those in the Flora. It
is a perennial, with numerous ^{radical}
ing branches. I enclose a part
of one plant. — He also gave
me the only specimen he had rec?
from a correspondent, of what he regarded
as a n. sp. of *Chamaebatia* - 4-5 ft. high
Until I came home I was of Bolander's
opinion - but the plant turns out to
be a *Spirea* - near my *S. multiflora* -
Please compare the fragments that I enclose

My Herb. paper is $11\frac{1}{2} \times 15\frac{1}{2}$.
I hardly dare order more than 15 reams
Yours in haste
J. Loney

a set of Wright's Cuban Hepatics
- but I can not take them for the College
as my usual appropriation ^{for this year} will be
exhausted in three or four months.

In a day or two I will send you
the order for all the Bot. Paper
that we can take.

Wether is pressing me to have my
old report on the Pacific Coast Plants
of his Expedition printed without
delay! I have written to Henry
Law injudicious this would be - & have
urged him to enlighten the "Joint
Library Com. of Congress," on this subject
- A general account of the Collection
with a few notes on certain plants, with
descriptions of the plates is all that should
be done. You must say so too
A happy new year, & much love to your Jane, Yours, I. T.

Thanks for the present of Bentham's interesting letter - It was sent up to
the College for me last evening. I. T.

New York, Dec: 19th 1872

Dear Doctor - I have hunted up &
down for Rafinesque's Friedallia - but have
not been able to find it.

As to Campanula, or Specularia
Ludoviciana, I remember reading a paper
on it, in which I drew a comparison
between it & C. a. S. amplexicaulis - but,
(like the paper on Crocodynia) it was
never published - And yet I feel
pretty sure it has been published some-
where. In my Herbarium is a speci-
men of the former, sent by Curtis, with
the label "This is your S. Ludoviciana!"
I am sure it has been sent to many
persons under this name.

I stated in ~~the~~ paper, read before the Syceum
that the Specularia (or Campanula) figured by R. & Pav.
had dimorphic, or rather polymorphic flowers like S. amplexicaulis.

Did you know that Judge Clinton
has gone deeply into Mushrooms? He
has sent ~~me~~ hundreds of good specimens
- all named - following Cooke

The Meisner Herbarium was to arrive
on the 18th - & I presume is now here
There will probably be no difficulty in
getting it through the Custom House
I intend to keep it separate from the
general herbarium, & to have it called
by his name. The is due to the dear
old man who made it, & to Mr. Crooke
the generous purchaser

Aug. 3rd/73! Here I was interrupted - & laid
my letter aside - then Herbert & Co, and
~~afterwards~~ I myself went, to Boston
Since my return I have been
waiting ^{to} get some things together for
you - but they are not ready yet

For several days I kept in the house
- Even on New Year Day. I merely ran
out to make a few calls. Every stormy
or very cold day. Herbert will send me up
the Reports to correct & sign. So I
hope to get comfortably through this
winter.

I am glad that you all were pleased
with the visit of Herb. & family. I will re-
- ply to your dear Jane's sweet letter - &
I have some reason to believe that her,
- & certainly my own, wishes will be
gratified

I will subscribe to Hook. I cover. Plant.
& receive it by mail. How often will
the publisher - & to whom shall I remit
the cash?

Crooke will probably subscribe for

Columbia College

Juny. 14th 1873

My Dear friend

I have resolved to take your kind advice respecting my Fossil Report on the Pacific Coast Plants of the U.S. Expl. Exped. I can not tell you, how you & Mr Watson's offer to take from it what is proper to be made public at this late day, has affected me. Although ^{my} love of science, & my ability to do certain kind of work have not abated - I am conscious of being old, & bodily labor soon wears me. Indeed I can not expect to remain much longer in the flesh - & it is my great desire to get rid of every thing that is distracting

I have glanced over the MS., & see very many imperfections in it - except in the part that you wrote yourself. Of course I refer to the Composite

As to *Megarrhiza* I think there can be but one species on the Pacific Coast. I have had no opportunity of examining the female flowers & very young fruits in a living state. In dried specimens the characters are made out with great difficulty. There is very great diversity in the fruit, & in the seeds. Naudin is probably right in referring the plant to *Echinops* - but the specific name must be the original one given in the Fl. N. Am.

Now, my dear friend, tell Mr. Watson how grateful I feel for his offer of assistance in my behalf. The flowering Endogens I have retained, as I wish to compare the specimens with my notes. The Canees were determined by Booth. & Thunberg; with Morris help named the grasses.

I hope that we shall get Dean Herbert & Louise's matter arranged very soon - If that is satisfactorily settled I shall have a great weight taken off my spirit.

The Meissner plants have been in the public Store in N. Brooklyn, about a fortnight - but owing to red labels at the Custom house, & lately, to the state of our streets, the heavy boxes have not been brought to the College - Tomorrow we hope to receive them, & they will be placed in temporary care for the present. As soon as the question of

rapid transit northward is settled, the Trustees will probably begin to build - but I hardly expect to see the Herbarium safely lodged in a fire proof building. Oh how I wish we had a suitable person to succeed me! - Poor old Lohy is very slow - & I get but little out of him. If Greene improves I have sometimes thought he might be engaged - especially if our College Chaplain, or Librarian should leave us. Such a bright fellow as he is, could easily perform the duties of both, as well as do some teaching.

I am delivering some Botanical lectures to a small class of College Students, who seem to be greatly pleased with what they see & hear, & at each lecture some new ones come in.

I have packed up the Nat. Report & shall send it to you by Adams' Express tomorrow -

safely lodged in the College, and we
are placing the specimens in temporary
cases. The portion of the Collection re-
tained, for the present, by the dear old
man, I think must be about one third
of the whole. As he is quite feeble
& will probably do but little more work
he may send the remainder in a
few months - but we have urged him
to keep it just as long as he pleases.

Yours ever

J. T. S. 1873.

Columbia College

Jan. 21st 1873

My Dear friend

I recd this evening yours of
the 18th - which must have crossed our
letter of mine, on the road.

You can do as you chose with my
ms. Mr Stuart (Com. Wilkes' agent)
said that the appropriation was made
last winter, & is sufficient for printing
(as I understood him) several volumes
of the Exped. Report. He also said that un-
less the printing was ^{not} commenced before

The beginning of March next, there was danger of the money voted by Congress being returned to the Treasury. It seems that they depend on my Report helping to make (with what Curtis, Harvey & Bailey, & Tuckerman have done) a "sizeable" volume! So it went so, I suppose, to reduce it to a mere skeleton.

I like your advice as to "folding plates" on thinish paper, for the extra copies that I shall add. Do you care for any? Perhaps 25 will do for me.

Decaisne has written to me for flowers & fruit of *Canotia*, as he is making a revision of Rosaceae, & has noticed the strange alteration of Beuth. & Hook. (Gen. Pl.) in what I expressly stated about the position of the radicle. Of course the plant can not be placed in Rosaceae, now that we know the flower. I have sent what material I could spare, & hope we shall have some light thrown on this puzzling homely thing. Did you ever examine the wood of it? It is quite remarkable.

The Meisner plants (8 enormous boxes - the contents splendidly packed) are now

little strength to do this: but I don't
think I have been injured by perform-
ing it. I sit up in bed to write, &
when done, turn over & rest, or sleep.

Mr. Crooke was here this morning, &
I could not refuse to see him for a short
time. He showed me ~~that~~ the letter
that you sent him, & said that he
would take a set of Hall's Texan
Plants.

There - I must stop - Will write
again tomorrow, if strong enough, & tell
you what I think of your proposition
about my Bot. Report -

Yours ever
J. Torrey

Columbia College

Feb. 6th. 1873

My Dear friend

Unless you have heard of my
sickness, you must have wondered at
my not writing to you lately. About
a fortnight ago. I must have taken
some extra care, for I was attacked
with what is familiarly called "a
stitch in the side" but supposed
it to be only a slight intercostal
rheumatism. It was sufficient
to disqualify me from study & cor-
respondence - & increased day by day
so that I attacked the disease with
ample mustard plasters, qualified
with ammonia & red pepper - &

these frequently renewed, until
my chest was almost raw. M.
& E. insisted upon my sending for
Dr. Haddon, our family physician -
who took me at once in hand & sent
me to bed! This was on Wednesday
of last week, & I have not yet
left my room. The Dr. said I
was suffering from pleuritis; & was
afraid that effusion had taken place
- but a careful examination showed
my chest to be all right inside - for
the pain had subsided & I could
take a long breath. I feel
pretty cheerful, & try to be pa-
tient. But I am greatly re-
duced

in strength. For several days
I have been using tonics, & take
small meals with some relish.

I can read but little at a time
- & nothing difficult to understand

A few days will show whether
I shall rally sufficiently ^{to} light
work. It may be that the
time has come for me to run down
gradually.

Every thing goes on pleasantly at
the Army Office. Herbert is the
chief of the assistants, & sends me
up every ^{evening} the Mem. Books containing
the results of the affairs for the day.
These I collate with the prepared
Reports, which are returned with my
signature. I have to exert all my

New York, Feb 10th 1873

My dear friend -

This is the ~~thirteenth~~ day that I have been shut up in my bed room, nearly the whole time in bed! For nearly a week my Rheumy has been quite heated & I have no pain whatever. But my strength is greatly diminished, & my flesh has gone I don't know where. Still I am cheerful, although I can not think of work, nor can I read any thing that is difficult. I take three small

meals a day with some relish & am using all sorts of tonics. I am more encouraged to day than I have yet been. But it grieves me that I have not been able to correspond with you respecting my Wilkes' Report. It was only to-day

that I had courage to read what you
have prepared at a condensed form
of the Report. I cordially agree with
you in this plan. It would not do
to print the Report as I left it. I mean
can repay you for being ready, at this
time of my weakness, to do me so great
a favor, & when you are overburdened
with your own work! It is probably,
even if I recover to some extent, that
my scientific work is done. My
great desire now is put my affairs in
order, & to have no anxious care on
my mind.

I return the pattern
sheets that you have prepared:

Mr. Fred. D. Stuart, of Washington, Com. Wicks,
agent desires to know when the printing can
be commenced. - I must stop here. Give
my love & sympathy to dear Jane
Ever yours J. Torrey

FRIDAY, MARCH 14, 1873

to be United States Consul at Amoy; and Daniel
Adman to be Pension Agent at Hartford, Conn.

NOTES

FUNERAL OF PROF. TORREY.

The funeral services of Prof. John Torrey of Columbia College took place at the West Presbyterian Church in Forty-second-st., at 3 p. m., yesterday. The church was thronged with spectators. In front of the pulpit were tastefully arranged wreaths, crosses, and anchors of the choicest flowers. The remains were inclosed in a beautiful casket of rosewood, profusely adorned with fragrant garlands. Upon it was a silver plate bearing the name and age of the deceased with the date of his death. At the left of the casket were seated members of the Society of the Cincinnati and 30 employes of the United States Assay Office. In the body of the church wore the faculty and many of the students of Columbia College, ex-Congressman Frederick Conkling, Peter Ceeper, Prof. Alonzo Clark of the College of Physicians and Surgeons, Prof. Upson of Hamilton College, and many others. The following were the pall-bearers:

Dr. William Parker, Dr. Delafield, Dr. Agnew, Prof. Asa Gray, Prof. Henry, Gen. Roome, Prof. F. A. P. Barnard, G. Albinola.

The services were conducted by the Rev. Dr. Hastings, pastor of the church, with the aid of the Rev. Dr. Hutton of the Weston Square Reformed Church, and the Rev. Dr. Prentiss of the Church of the Covenant. After the singing of the hymn, "How blest the Righteous when he Dies," prayer was offered by the Rev. Dr. Hutton.

An address was then delivered by Dr. Hastings. He spoke of the pleasant intercourse he had ever held with the deceased throughout an acquaintance of more than 30 years. Prof. Torrey, he said, was one who had sought the truth for itself alone, totally uninfluenced by any desire of gain. Having been his pastor for ten years, the speaker was prepared to testify that he had never lost his firm grasp on Jesus, but had ever been a devout and sincere follower of Christ, feeling his own utter weakness, and depending on Him for strength. Eminently a Christian scholar, he believed the God of the Bible and the God of nature to be one and the same Being. Nothing in the scientific investigations of the world gave him more sorrow than the researches which had been made with the idea of disproving Bible truths. His great heart, had in it much of womanly sensibility and tenderness. He was ever ready to lend his aid and sympathy to any good cause. In conclusion, said Dr. Hastings, the Professor has left us noble foundations of Christian scholarship upon which all, especially the youth, should strive to build. We should strive to follow the noble example set before us in his career, so long and so unusually successful. A noble foundation for scientific knowledge has been left to the world by this most able of scientific men. But best of all he has left for all future generations, a character unimpeachable for integrity and honesty, with a true Christian example which it well behooves us to follow. To have obtained such a character is the grandest, highest, noblest achievement of man.

Dr. Hastings was followed by Drs. Hutton and Prentiss, who referred to the long and successful career of the deceased, and bore additional testimony in regard to his Christian life and exalted character. The remains will be taken to Woodlawn Cemetery this morning for interment.

A SHERIFF KILLS A DESPERATE ASSAILANT.

LOUISVILLE, March 13.—In New-Albany, Ind., yesterday, Alonzo James, engineer on the Louisville, New-Albany and Chicago Railroad, while his brother

Extract from the Proceedings of the Boston Society of Natural History,
March 19, 1873.

The President announced the recent death of the celebrated Botanist, Dr. John Torrey, an Honorary Member of the Society for over thirty-two years.

Dr. T. Sterry Hunt having been requested to prepare an account of the life of Dr. Torrey, the following notice was read at a subsequent meeting.

Dr. John Torrey died of pneumonia at his home in New York, on the 10th of March, 1873, in the seventy-seventh year of his age, having been born in that city on the 15th of August, 1796. Choosing the medical profession, he graduated as doctor of medicine in 1818, and in 1824 was appointed professor of chemistry, mineralogy and geology in the Military Academy of West Point, but resigned his post in 1827, to accept the chair of chemistry and botany in his *alma mater*, the New York College of Physicians and Surgeons, of which he discharged the duties most acceptably until his resignation in 1855. During the greater part of this time, he occupied also the chair of chemistry and natural history at Princeton, to which he was named in 1830, resigning it only in 1853, when he was made chief assayer to

the United States assay-office, a post which he held, constantly discharging its duties, till his death. He was also, for the latter years of his life, a trustee and a professor of Columbia College, to which, in 1860, he presented his large botanical library, and his extensive and valuable herbarium. He however retained the use of these during his life-time, and making his home near them, in the college where they were deposited, spent many hours daily in the last years of his life, in the study of his favorite science; for while his official duties have made him known to the world outside as a chemist and mineralogist, it is on his botanical labors that his scientific fame will chiefly rest.

He early gave himself to the study of botany, and as long ago as 1819 published a catalogue of the plants growing within a radius of thirty miles of New York. Fifty years later his botanical friends celebrated the anniversary of its publication, by a banquet given to the Nestor of their science, in the decorations of which the *Torreya taxifolia*, belonging to a new genus of Taxaceae which had been named for him, was not forgotten. A Flora of the Northern and Middle States in 1824, a remarkable monograph of the Cyperaceae in 1836, the Flora of the State of New York, in two volumes, in 1842-44, with various Botanical Reports of the results of United States exploring expeditions from 1828 to 1858, comprise the chief part of his published contributions to botany. He moreover edited with his friend, Dr. Asa Gray, the Flora of North America, and has, we believe, left behind him a large amount of manuscript notes on botanical subjects, nearly ready for publication.

But while thus doing such a vast amount of original work in this department of natural history, he was wont to say playfully, that botany was his amusement, and chemistry and mineralogy his profession, as they had been his first love. In the early part of his professional life, he published several valuable papers relating to these studies, including observations and analyses of various American minerals, but although he never abandoned such pursuits, and habitually

spent more or less time in chemical work in his laboratory, he in subsequent years gave us little or nothing of his results. His great familiarity with the literature of chemistry and mineralogy, his fertile mind, and his acute powers of observation, fitted him nevertheless, to be an investigator of a high order. The patient scrutiny with which he examined any new mineral substance, calling in the aid alike of chemistry and the microscope, was the delight of those who were admitted to his confidence. That he did not elaborate the results thus obtained and give them publicity, is to be ascribed in part to his great modesty, which led him to under-rate the value of his observations, and in part to the fact that his time out of the laboratory was chiefly given to his botanical investigations, which divided his allegiance, and deprived mineralogy and chemistry of many precious contributions which, it is to be feared, are now lost, and must await a second discoverer. An example of this occurred in a long and carefully written letter, containing observations on the varieties of iridosmine from our Pacific coast, sent to the writer of this notice, with specimens for verification, some two years since. When urged to publish his facts, Dr. Torrey declined, saying that they were too insignificant.

The moral nature of Dr. Torrey was one of rare excellence and beauty. An engaging frankness, a genial humor, a generous sympathy and a child-like simplicity of manner, with a happy religious faith, endeared him to all who were so fortunate as to be admitted to his intimacy; and he was always ready to extend a helping hand to young aspirants in science, who never sought in vain his council or his aid. He retained to the last a lively interest in all his scientific pursuits. Such a man could never grow old in heart, nor were his powers apparently enfeebled by advancing age. In November last, the writer listened to him with delight, as he turned from learned and judicious comments on a recently published chemical treatise, to his microscopic studies on certain sands, where his keen vision had just made discoveries which had eluded the scrutiny of younger eyes; nor

was it until a few weeks before his end, that illness obliged him to relinquish his daily attendance at the assay-office. He died as he had lived, quietly, surrounded by an affectionate family, and cheered by the hopes of a Christian. His name is written imperishably in the history of American botanical science, and his monument is Torrey's Peak, that lofty summit of the Rocky Mountains which bears his name, and rises side by side with Gray's Peak, named for our other great botanist, his life-long friend and fellow-worker, who can alone do justice to the story of the long, busy and useful life of Dr. John Torrey.

T. S. H.

à Mr. Mr. Asa Gray Turzominsk

Monsieur!

Je vous remercie infiniment pour votre bonne
lettre de 8 Août et surtout pour les collections
que vous avez eu la complaisance de m'envoyer.
Je ne les ai pas reçues, mais elles doivent être très
intéressantes, puisqu'elles doivent contenir plusieurs
espèces, dérites par vous.

Je serais avec le même courrier au Secrétaire de
la Société des naturalistes de Moscou et j'ai
prévu d'envoyer à l'Académie de Boston les bulletins
de la société. Quant à mes brochures je vous les
enverrai avec cette lettre, à savoir le premier volume
Flora Baicalensis. Tchurina. Le second, dont le dernier
faisceau s'imprime à Moscou vous sera envoyé sous
peu de temps. Excusez les fautes de l'auteur, quant
aux fautes typographiques, qui sont assez nombreuses,
elles ne sont pas sur ma conscience, puisqu'les bro-
chures ont été imprimées à Moscou, quand j'ai été très
éloigné de cette ville.

Je plains beaucoup, que je suis rencontré avec
vous au sujet des composites. Sans aucune doute
si je savais, que devriez les mêmes plantes, ou que vous
aviez l'intention de les décrire, je n'aurais pas fait
le travail superflu. Mais ce qui est fait, est fait et
il reste à éclaircir la synonymie. Si vous voulez entre-
prendre ce travail, vous aurez les moyens en voyant mes
descriptions et les numéros cités des collections de Drumond.
Je vous prie seulement de m'envoyer les numéros
de vos plantes, car il est assez difficile à moi de les trouver
car je n'ai pas reçu les deux premières collections de Drumond.

Je serais charmé de pouvoir envoyer à vous une collec-
tion des plantes de la Russie, surtout de la Sibirie orien-
tale où j'ai beaucoup voyagé et je possède en ce
beaucoup des doubles, mais à présent je suis très occupé
avec l'herbier du feu Schultze, acheté nouvellement.
Mais vous pouvez toujours compter sur l'envoi de
ma part, dès que je serai plus libre.

J'ai été forcé d'écrire à vous en français, n'ayant
pas le bonheur de connaître la langue anglaise.

Veuillez agréer l'assurance de la considération
la plus distinguée avec laquelle j'ai l'honneur
d'être

Votre très dévoué ami et serviteur

N. Tourczaninoff

le 9 octobre 1859

Kharow

Amélie, 10/10/56

Monsieur!

J'ai l'honneur d'envoyer à vous deux boîtes
de ma Flore (Baikal. Dahourie), que je vous prie
de recevoir avec l'indulgence.

Il y a bien longtemps, que notre correspondance
a été interrompue dans son commencement, proba-
blement à cause de la guerre. J'espère, que
puisque cet obstacle n'existe plus, vous aurez le
bonté de m'envoyer la continuation des ouvrages,
que vous m'avez envoyés, aussi que quelques collections
des plantes, dont j'ai vous ai prié, etant prêt, si tel
sera votre bon plaisir, de vous envoyer la collection
des plantes Baikal. Dahouriques et de quelques autres
de la Russie.

J'ai l'honneur d'être avec la considération la
plus distinguée

25 Août 1856
6 Septembre

Kharow.

Notre très humble serviteur N. Pavlov =
C. Zaimov.

C. Zaimov.

Hyde Park, Mass.
Aug 13, 1885.

Prof Science Watson

Dear Sir; I have been
referred to you by Messrs Linsion,
Blosser & Co for information
in regard to a catalogue of the
plants contained in "Pays Manual"
adapted to making excursions
for exchange. Can you tell me
if such a catalogue is published
and if so where it can be obtained?

I would also like to ask if the in-
closed is a specimen of the *Oenothera*
sinuata. It was found in a
gravel bank in Hyde Park growing
erect.

Yours very respectfully
Samuel F. Tower.

SPECIAL ATTENTION
GIVEN TO
FILLING ORDERS
FOR
MUSEUMS AND PRIVATE COLLECTIONS.

BIRDS, ANIMALS, ETC.,
Mounted to order.

Finely executed groups for decorative purposes
constantly on hand.

OFFICE OF

J. L. TOWNSEND,
PRACTICAL NATURALIST

Collector and Preparer of Specimens
IN EVERY DEPARTMENT OF BOTANY & ZOOLOGY.

Salt Lake City, Utah, June 19th 1875

Prof. Isaac I. Taylor
Harvard University
Chicago

(In I make arrangements with
you by which I can secure a higher remuneration
for botanical collections of this locality.

If not over a hundred to me in
this case I will be pleased to collect.

Yours respectfully,
J. L. Townsend

Phytolacca americana, 287 (*P. americana*)

Andromeda pulchella, 289 (*A. moniana*)

Vaccinium myrsinifolium, 291 (*V. myrsinifolium*)

" *myrsinifolium* " (*V. myrsinifolium*)

" *pulchella*, 291 (*V. myrsinifolium*)

" *macrocarpum*, 291 (*V. macrocarpum*)

Urtica dioica, 321 (*U. dioica*)

Urtica dioica, 322 (*U. dioica*)

Urtica dioica, 323 (*U. dioica*)

" *horrida*, 323 (*U. dioica*)

Laurus abbreviata, 344

" *fragrans*, 344 (*L. fragrans*)

" *virginiana*, 344 (*L. fragrans*)

Hibiscus speciosus, 348 (*H. speciosus*)

Nicotiana glauca, 348 (*N. glauca*)

Leonurus japonicus, 348 (*L. japonicus*)

Passiflora incarnata, 348

Passiflora incarnata, 348

Passiflora incarnata, 348

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Mississippi Agricultural Experiment Station.

EXPRESS AND TELEGRAPH OFFICE.

STARKVILLE, MISSISSIPPI.

S. M. TRACY, DIRECTOR.

Agricultural College, Miss. Oct. 15, 1891.

Dr. S. Watson,

Cambridge, Mass.

Dear Sir;

The last issue of the "Torrey Bulletin" has a note in regard to a new species of Zea which has been sent to you from Mexico. At this Station we are giving special attention to grass culture, having over three hundred species in cultivation, and I am anxious to procure a few seeds of this. Will it be possible for you to send them to us? If you can do so, it will be a great favor.

In my herbarium I have duplicates of several hundreds of grasses, many of them having been grown here from foreign seeds, especially Russian, Indian, and Australian species. If you would care for them I shall be glad to send a set in exchange for other grasses, either native or foreign. I am informed that you have quite a number of Dr. Thurber's type specimens in duplicate, and if any of those can be spared I would be especially glad to secure them, either by exchange or purchase.

Yours very truly,

S. M. Tracy.

Near Salem, Mass., Dec.
17, 1887. The Springfield
Republican reports you
very low with apoplexy. I
hope it is misinformed,
and that you are to live
for years. Your loss would
be, little as I have been
actually with you, a per-
sonal bereavement.
Whether you live or not
you have my blessing
and esteem. Do not
waste any strength to
ouster.

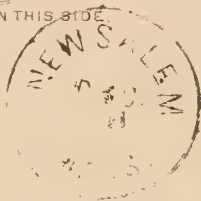
Best wishes.

J. Nelson Thayer.

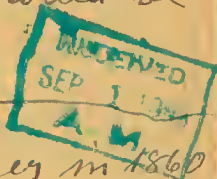


NOTHING BUT THE ADDRESS TO BE ON THIS SIDE.

Asa Gray, Esq. D.,
Cambridge,
Mass.



New Salem, Franklin co., Mass., Ag. 30, '88.
In Gray's Manual, 1870, 5. edi., 4. issue, p.
457, under *Myrica Gale*, "nuts" should drop
the s, and take a comma after it, to agree
with "its base" farther on; and "heads" then
should be head. This would be the result:
nut, in imbricated head, 2-winged-----
P. 505, low, Statics, "gabrous" should be
glabrous.



As a Gray was my teacher in '60
and '61. While he was alive I knew just
where to find the patient, careful, thank-
ful man who adopted true corrections
as readily as if they did not impugn
infallibility: a nobly good man was the
stock upon which the teacher was graft-
ed. The use of signs for words tripped
him in many places; and, ^{the}condensing of
descriptions occasionally made sub-
jects and words depending upon them
disagree. "Leaves", in that same *Myri-*
ca, is not in agreement with "apex";
but leaves vary so much on a single
stem that he seems to have had in
mind the average or composite leaf,
when he said leaves. Such expressions
often could not be altered without re-
writing a period or a whole paragraph.
They also do not puzzle nor mislead: oth-
er writers have the same failing. I showed
the doctor many of the marks of my mar-
gins, many of which he adopted. These two
are late observations. Some too he adopted
in the revised volumes of the general flora. If
you still print the Manual, and I notice other er-
rors, I will send them. J. Nelson Trask.

WE WILL PAY YOU \$10 FOR EVERY GOOD AGENT THAT WE SECURE THROUGH YOUR RECOMMENDATION

In almost every locality there are men and women

who have had more or less experience in some agency business. Also there are always those who, having been unfortunate in their business undertakings, are in need of profitable employment. Send us the names and addresses of all such people whom you may know, and we will write to them giving them our terms and particulars. Those who take agencies will make money; they cannot help it, and for each one who takes an agency through your recommendation, we will send you ten dollars as soon as the agent has done business with us to the amount of one hundred dollars.

We wish you to give us the names of but five people, and if you give us the names of those who need employment, or who have had some experience in the agency business, you may secure fifty dollars, and you will be almost sure to secure ten, twenty, or thirty dollars, if you send us the names of those who amount to anything at all.

Remember that you should send the names of those who have had some experience in some agency business, as far as you may know of them, and then fill out the remaining blanks, if any are left, with the names

of those who have been unfortunate in their business undertakings, and now need profitable work. Probably you know of a number of persons who have had agencies for sewing machines, machinery, fruit trees, books, magazines, papers, pictures, maps, etc., and will be able to give us their addresses, and for every such name that you send us you will be almost sure to receive ten dollars, for such people, having had some experience, will see at a glance that there is money to be made at the business, and will take agencies, and then will rapidly send us large lists of subscribers.

Names of those whom you Recommend.

Post-Office Address.

County.

State.

What agency business has the person conducted, if any?

1						
2						
3						
4						
5						

If you cannot send us five such names as we have expressed a desire for, send as many as you can. You cannot, so easily in any other way, secure from ten to fifty dollars.

YOUR NAME

POST-OFFICE

COUNTY

STATE

DATE

188

Geistiges Leben!

Meine Bemühungen, den Menschen aufzuklären, welche Sie in Person gemacht haben, waren 15 August d. J. überproportional groß, haben Sie empfunden, dass meine Bemühungen sich vergrößert hat. Ich bedauere dies um so mehr, als die Rücksicht sich immer vergrößert hat, indem es mich dazu gezwungen hat, meine Bemühungen zu bekräftigen, dass ich Ihre Bemerkungen nicht werden erfüllen können. Mein Misserfolg in dieser Angelegenheit ist nicht allein darin begründet, dass ich Ihnen seit Jahren mein Haupt anliegen bekanntlich nicht anvertraut habe und mein Werk mit der Öffentlichkeit dadurch sehr beeinträchtigt worden ist.

Die Arbeit über die *Salices frigidae* ist nur mehr als 50 Jahre erschienen und besteht in gegenwärtig nur ein einziges Exemplar davon, welches ich nicht erhalten kann. Ein anderes ist in meine Hände, ist mir nicht gelungen. Die in der Arbeit abgezeichnete Methode besteht in selbst nicht. Das Material zur Arbeit liefert mir nämlich das Lesebuch des Herrn, welches mir mein verehrter Lehrer zu benutzen gestattet. Das Lesebuch des Herrn befindet sich genau gegenwärtig in Besitz der künftigen Botanischen Gärten, da aber in denselben die von mir beschriebenen Methoden nur in einzelnen Exemplaren (wahrlich mit Zustimmung des geneigtesten Herrn) vorhanden sind, so lässt sich nur denselben nicht abgeben.

Ich habe meine guten Willen, Ihnen mit so persönlichem Eifer mein Werk zu widmen, aber den vorliegenden Anstand

anderen Umständen uns sehr befriedigen, daß ich Ihnen mit
meinem Buch die Diagnosen der 4 Arten zu senden auftrage,
welche Sie insbesondere interessieren und mich Ihnen gegebenem Abbild
dies wenigstens theilweise ergiebt. Sehr können Sie die Abbildung und
Abbildung der Pflanze selbst mit aufzeigen, doch wird es sich immer
meistens wenigstens für Sie sehr nützlich sein.

Ich sende Ihnen nun noch folgende Bemerkungen beigefügt:
fügen: Die *Sal. callicarpaea* unterscheidet sich von *S. glauca* L.,
wohl nur durch die Gestalt des Blattes, — die *S. diplocladia*
von *S. crassifolia* Trev. = *S. arctica* Pall. (von R. Br.) nur
durch *folia subtus viridia et lucida*, — die *S. ovalifolia* von
S. myrtilloides L. durch *ovaria pubescentia* und die *S. rotundifolia*
von *S. retusa* L. durch *folia puberliculata*, von *S. herbacea* L.
aber durch *folia integerrima*. Darüber, ob die 4 genannten Arten
in der That selbstständige Arten sind, läßt sich natürlich streiten.

Grüßliches Sie, grüßtes Ihnen, den Besten meines
Bedauern, daß ich Ihnen freundlicherweise nicht zu antworten vermöge,
und die entgegenstehende Beschäftigung, und welches ich die Ihre sehr zu
sein

Hr

gegebenen *Plant. Europ. orient.*

Befriedigung d. 20. Juni 1884.
2 Juli

Trentschner

4 the reasoning animal, and that family of it too that is of the blood of Dante and Raphael and Columbus and Galileo, should be incapable of better things? That this heavenly genius for art and science and noble enterprise should coexist in the same beings, or blood, that are incapable of maintaining the simple machinery of free institutions of government? When I reflect upon the difficulty of free institutions, and see, as I think, the tendency to destroy them, or introduce monstrous evils ~~to~~ along with them, even in our own country, I lament that the divine wisdom had not seen fit to create some variety that should have the same relation to man, that the Queen Bee has to that insect, ~~whose~~ who should possess the true attribute with the prerogative for rule. A family that should produce a succession of Antonines or Markingtons who should have enlightened by the true grace of God. Should we not have been better off? Besides all the oppression, war and violence of the old world, what an amount of (p. 5)

Rome Decr 17th 1854

Dear Sir

I am very greatly obliged to you for your letter, which I received about a month ago, when I was in Florence. The account of the Academy and the dissatisfied members I should not have obtained from any other source. I hope that Mr Agassiz will hold, to what cannot but be his true interest, and aid in the active work of the Academy, which must furnish the best vehicle for diffusing his discoveries. I see that the ten thousand dollars from the Appleton estate is published, as awarded or rather assigned. This will give great relief from the necessity of begging which has heretofore oppressed us. Now that I am upon this subject I wish you, next spring at the election, to withdraw my name from the candidates for Vice President, if it can be done without manifest disadvantage to the list. At any rate, do not let me stand in the way of any one whom the right mind of members are desirous of electing.

² My voyage to England was very comfortable, even pleasant. I crossed the channel to Antwerp and went from thence to Cologne. Then up the Rhine and across the Alps by the Simplon to Milan. Then to Venice and back to Verona (This was on account of a quarantine in the Papal states on all passengers less than six days from Venice on the way to Bologna.) From Verona I passed through Mantua, Modena and Pistoia to Florence. The party consisted of Mr Incewell and Dr Ince and family, making, all of us, nine persons. We had nothing untoward to mark the Rhine journey or any other part of our course. Pleasant weather and good health all the way. At Florence we spent about five weeks, when I found everything, except that which pertains to the government, just as I left it seven years ago. I recognised many of the beggar faces and the flower girls seem no older than in 1847-8. But in Florence as well as in all Italy what a political change! In 1848 the eternal drum and the patriotic songs stunned one from morning to night. Now all is quiet and

still as a Boston Sunday. The Austrians in Lombardy and Tuscany, and the French here in Rome, are always within call of the police and the government, as it is, must go on, good or bad. The opinion of a foreign traveller as to the advantages or defects of the government of a country cannot be of much authority. I should therefore, distrust any opinion that I might form from my own observation. But I talked a few days ago with an intelligent Italian of the middle rank whose desires and interests are all with the liberal or liberty party, and to which in 1848 he belonged. He is now decided that Italy is better off under the foreign guard than it can be under any government or constitution that it has, or can establish. The miserable demagoguery of Mazzini and the men of '48, if left alone would have ended in the overthrow of all order, and the rights of persons or property and Italy would in the end have presented a scene of turbulence, unendurable to civilized people. I can see no reason to doubt the justice of my Italian friend's opinion. Is it not lamentable that

the difficulties has been overcome. The number ^{of these}, of various kinds, is considerable, and I should think that the tendency to Rome, in England, is on the increase.

I see by the papers that you have done gloriously in the elections in the U States so far as the Rebrastory persidy was concerned. But what is the meaning of this know nothing overturn in Massachusetts? It is to me yet a riddle that I cannot guess. It cannot be, as the party has 75 M. votes in Massachusetts, but it is substantially a sound party. If it is not so, what is the use of the Schoolmaster abroad? But if it is so, why turn out such men as Gov. Washburn and Mr. Appleton, to put in nobody knows who? There is not a soul in the delegation to Congress, except ^{Mr} Fraunk, that I had ever heard of before. The whole thing seems to me as the result of a political epidemic as strange as that which gave Napoleon the crown in 1815, or that which destroyed Louis Philippe in 1848.

Mr. Meadwell desires kind remembrances ^{to you and} to which may join mine to Mr. Gray. Remember me also to every soul of the Club, which I sincerely believe is the finest club in the world. To Judge Fay Prof. Baird &c. and believe me very sincerely,
Prof. Asa Gray
Paul Meadwell

15-
fraud, tom foolery, humbuggery and know nothingness it would save us in the new. But the Lord knows best.

We arrived in Rome on the 7th inst. The 8th was the festival of the conception of the B. V. M. which was celebrated this year in greater splendour than it ever was before. It seems that the pope, since his return from Gaeta, has become very devout and for the last two or three years has been pondering upon the sublime mystery of the Immaculate conception, that has in all ages been considered as one of the most difficult of the true faith. Having called a council of Cardinals and Bishops to his aid, he determined that this should no longer remain what the British ministers call, an open question, but that it should be authoratively decided, and that it should hereafter be an article of faith, necessary to salvation, to believe the virgin immaculate and free from all taint of original sin. The bull embodying this dogma was promulgated on the 8th at St. Peters, in presence of some fifty Cardinals and hundreds of Bishops, with all the show and glory that Rome could

furnish. The day ended with that rare and truly magnificent spectacle, of an illumination of the whole of St. Peter's. We considered ourselves lucky in arriving in Rome just in time to see the whole exhibition.

I have procured an authoritative copy of the Bull and of the ceremony of its promulgation "in choice Italian" which I will send, if the postage is not too much, with this letter. Pray let Dr. Walker edify himself with perusing it, that is if you do not think there is any danger of its converting him to Romanism. Probably there is no danger, for the man that could withstand Judge Edmund Lord Bacon, and Ching of China will not be likely to yield to Pio nono.

This reminds me of something I heard the other day of old Dr. Hare. Has he really become a convert to the spiritual rappers? There is a strange story here that he proves, with an apparatus more perfect than Faraday's, that the table moves without any force from the hand of the medium.

The weather of Rome is, most of the time, very delightful. I have not seen the thermometer below 30° . No frost and the Pincian hill covered with green foliage like Wexford in a wet August. We look

from our windows over a garden of oranges just ripe. All this seems in contrast with the shortness of the day, which we associate with polar regions, and here the day seems shorter than at Boston, though really the same at its shortest. Our 10 degrees ^{Fahr} too high and 30° degrees too low are a sad damage to our climate. Amongst the Americans here at present, we have found Mrs and Miss Clarke formerly of Cambridge. Mr George Bradford. Mr and Mrs and Dr. Wales of Boston. and Mrs Peters formerly Mrs King of Cambridge.

Amongst the amusements, I find a considerable one, in seeing, at Piale's reading room, the English ecclesiastics sporting their Romanism. I can tell by the dress and manner the exact amount of "proclivity" to the elder faith. The white cravat, hat, somewhat large in the crown, & single breasted coat, means a few candles and the back to the people during the offices. This can be traced in and through various other grades, up to the full three cornered shovel hat, and long close fitting coat, the wearers of which avow for the "rascal Galignani!" This means fraternity and perhaps full communion. If when the hat is removed I discover the "clipped crown", there can be no doubt but transubstantiation the last of

March 18th 57

D Freedwell

D^r Sir

I have read over your paper with some care and do not see how it can be controverted. Let me suggest however that you strike out on p 3 what I have surrounded with a pencil mark and substitute something like this "It is evident however that the present case is to be settled by the statutes as they now stand"

Again on p. 546 it seems to me that the meaning is embarrassed by too many words. I should strike out all that I have marked on the margin and insert something like this "It must have intended to do one of two things. Either it intended to elect D^r Peters whether he were a resident of Massachusetts or not. Or, it assumed the fact of residence

D^r Gray

Lincoln Street

as it does in other cases, but did not intend by the balloting to decide that he should be a resident fellow even if he were not ^a resident of Massachusetts.

I think that something short, like this, will leave the horns of your dilemma more naked.

People are apt to lose their way in going back and forwards from first to second as it now stands

Very truly
D Brewster

June 9th 40
Treadwell

Dear Sir

Suppose you put a note
to the Councils notice of Humboldt,
starting ~~in~~ from 1769, the following
names Napoleon - Wellington -
Mehemet Ali - Soult - Lannes -
Ney - ~~Arthur~~ Cartteragh - Chat-
aubriand - Cuvier - and Humboldt.
I find Metternich doubtful - Dr
Lieber has Sir Jas Macdonald among
his men of 69. He was born in 65
This with Canning and Sir H Pitt
makes three wrong in about eight

Very truly
Yours Treadwell

Dr Gray

Tribune will pay for the sketches separate from the article, some of the magazines do so. If Prof. Goodale makes any sketches he must have the credit and pay. So I send the MS for his inspection, and when straightened out it can be sent back to me, or direct to Tribune as you prefer.

As you have written to Mr. Crandall there is no necessity for my doing so, for which I am very thankful.

I thought Crandall would not care for the article without your public endorsement, but if he still wants it, it must go to him.

Yours very gratefully
Mary Heath.

Trent

Lineland, N. Jersey,
Dec. 27, 1874.

Dear Dr. Gray,

I do not send this MS to ask you to look at it personally, for I know how you must be driven to death with work, and sick too.

I have tried to follow your advice, and in a condensed way, to show something of the progress of my work. But I never need expect to attain to anything like the excellence of your clear, strong style. I am impatient with the pen - can't fix things on paper so that others can see them clearly. If there was only some way of impressing what we find - and to us is so clear - without the tedious process of the pen, how much faster we could get on!

Yes, I think it is better
that Darwin's letter should be
alluded to, but it never occurred
to me that he could think of such
a thing as you mention. Oh, no!
he could not think that of you.

What would have been your object?
And it would not have been half
the work, if I had only had a
hint that any one else was looking
in the same direction, but as it
was, you can see how very much
more carefully and closely I had
to study. It would have been of
immense advantage to me to
have worked under Darwin's or
your direction. After I had
spent so much time, it seemed
like wasted energy when you
informed me that Darwin
was also at work on the same
thing. What difference does
it make who first sees or

works out any new fact?
Personalities should be lost
in the grand thought of one
more step gained, toward un-
locking the great truths of
nature.

I have had a few sketches
made, but they do not suit me.

Has Prof. Goodale examined
the bladders carefully with a
Binocular? Gent's magnifier $1\frac{1}{2}$
objective shows the tunnel
beautifully. There is no mis-
take in this matter of the tunnel
arrangement, it shows as plain-
ly in some of the bladders as
the stellate-points, and those
club-shaped thineys at the en-
trance of the tunnel, which
I have not yet found any
use for!

I wonder if the

Yours of April 2nd rec'd. - I am unable
to write to day, but I send a package
of the 6-angled Iris with as well-developed
fruit as I could find; also two
more marked forms of the 3-angled.
The smaller form ("No. 5," in my notes!)
is constant in character and grows in
rich soil only a few rods distant from
the 6-angled. The other - almost grass-
like leaves - grows as isolated plants
in rich damp woods. - 5 forms, but
probably only two distinct species undescribed
April 9th. M. B.



WRITE THE ADDRESS ON THIS SIDE—THE MESSAGE ON THE OTHER

Professor C. S. Sargent,
Director of Botanic Garden,
Harvard University
Cambridge,
Mass.

Wet places. Florida. February
to May. - Stem 2° - $3\frac{1}{2}^{\circ}$ high.
Lowest leaves 2° - 3° long, 1° - $2\frac{1}{2}^{\circ}$
wide. Perianth $2\frac{1}{4}$ $3'$ long.

I looked for and picked
some of the longest leaves that I
could find among those that
grew in the drier soil, but
the flowering stems are just
as they came in my way
without any regard to length.

I shall wait with interest
your decision with regard to this
Iris.

Sincerely yours

Mary Kent

Please observe that the angles
of the seed-reel ~~are~~ ^{are} ~~now~~ clearly
defined, in this that I send you
today..

Green Cove Spring, Fla.
April 2, 1877.

Dear Professor Sargent -

I send to-day stems
and leaves of a form of Iris
that might almost be called
distinct from the lighter-color-
ed, stouter-branched stems.

I have devoted several
days almost exclusively to this
Iris, visiting it far and near
- measuring and comparing
it in different situations.

This that I send to-day,
grew about a mile back from
the river in damp pine barrens
along the roadside. I did
not see a single branched
stem; what I send is a fair
sample of quite a large tract.
The ground was so dry where
it grew that I could walk

anywhere among it. But only a few rods distant was a swamp where acres of it grew in such deep water that I could manage to get only a few stems. These again the stems were stouter, and most of them branched, and the leaves longer and wider, but not quite so broad as those I sent you a few days ago, which were growing in rich mucky soil along the St. Johns.

This, back on the barrens is more conspicuously crested than this on the river, yet it is all more or less crested and slightly bearded, and is undoubtedly all the same thing.

I have tried hard to make two distinct forms, but cannot do it!

Please call Dr. Gray's attention to the conspicuous crest— even more conspicuous than in *I. hexagona*.

I copy from my notebook the following specific characters, drawn ~~from~~ made after a careful study. It may need modifying somewhat, this I leave to you and Dr. Gray.

"Iris — Stem terete, simple or branched; leaves sword-shaped; flowers spiked, crested and slightly bearded; perianth pale blue or deep dark blue, variegated with yellow, purple, and brown; the inflated tube shorter than the obtusely 3-angled ovary; stigmas with the lips crenate; capsule oblong, 3-angled.—

Green Cove Spring, Fla.
Apr. 5, 1877.

Dear Dr. Gray -

I send, with this note - enclosed in an old Magazine - specimens of different types of the flower of the Iris - the leaves of which "never grew on an Iris!"

Professor Sargent will not get good flowers from the stems I have sent him, flowers that open after the stems have been broken off a week or so, and very insignificant compared with those in the normal condition, yet I hope you will be able to see the crest and the well-defined angles of the petal-vein, both of which disappear in the pressed specimen.

Open the Magazine
carefully.

Open the Magazine
carefully.

Yesterday morning I crossed the river (5 miles broad here) and landed at a point twelve miles below, where I spent the day among the Iris. Here I found I. hexagona scattered all about among this other, sent to Professor Sargent, and also a form more nearly approaching our northern verri color than any I had yet seen. And I also found this crested, 3-angled Iris, even more gravel than any on this side - leaves measuring over 4° in length, but not so broad as some that I have found on this side.

Iris hexagona does not answer to the description in Chapman's Flora. The anthers are long and broad, and there is

always a pair of terminal flowers. Let the stems be ever so dwarfed, so they will not produce axillary flowers, yet this terminal pair is ever present.

When I first found this plant, it was so much taller and the flowers so much larger than the description, together with these other characteristics, that I thought it could not be hexagona, but on the other side of the river it is all right as to size, and is no doubt hexagona, the stemmers and parts of which I enclose.

I am making herbarium specimens ^{of the entire plants} of all the forms of Iris I find. Let me know if you want specimens, for I do not care to make more than are needed. Most truly M. Great,

Green Cove Spring, Fla.
April 11, 1877.

Dear Professor Sargent -

Yours of Apr. 4th
& 6th are at hand, and before
this reaches you, you will have
received the 6-angled species.

Of course I have no hexagonum
to compare it with, but it does
not answer to the description
in Chapman's Flora, - "Stigmas
much longer than the anthers,
nearly as long as the interior
perianth -" whereas in this species
that I send the anthers are
long and broad, and the in-
terior perianth much longer
than the stigmas, and then
another thing, this white silky
bract that persistently covers
the capsule I should have
thought of sufficient impor-

tended to mention in the
description. But of course
I can do nothing alone.
I will leave you and Prof.
Gray to work up the technical
descriptions.

I send to-day seed-
vessels gathered from different
points. - The largest stoutest
stems - thick with a white-
stringy green in garden-soil
where it was left standing
when the garden was made.
The leaves are perfectly im-
mense, fully as wide as
any I have found in the
rich mucky swamps, but
not quite so long.

Crinum amabile is
in flower! but it is
mail time, I will write
about this in the afternoon.
Yours truly May 2nd

me! But when I read you
rightly, my sarcasm was no
sarcasm at all!

I suppose you have
not the remotest idea of the
work, time and money that
I have spent on this Iris. I
have taken 3 Steamboat ex-
cursions - the last 20 miles
up "Black Creek" with no
result ~~with no result~~ worth
mentioning - and innumera-
ble short excursions in a
row-boat, with a man to
row and to go into the more
difficult places to get the
Iris. At some points where
we could not land, the man
has taken off shoes and stock-
ings and waded through the
mud and water to procure
specimens. I have about
a hundred specimens now
in press. - You have said

Green Cove Spring, Y. C.,
April 11, 1874.

Dear Professor Sargent -

I forgot to tell
you this morning that the package
of the 6-angled Iris had to be sep-
arated after it reached the office,
and the two forms of the 3-angled
were put in a separate package
which I hope will reach you safe-
ly. It seems to me this smaller
one is marked enough to be
called a variety of the larger,
It ~~seems to me~~ ^{think} it must prove
constant in character, for it
was growing in good soil, and
now not than our garden soil
where it grows so large. The first
leaves that I sent you were from
plants in the garden, no fer-
tilizer used except the river
muck, and as I said before,
these leaves are about as broad

is any I have found, but not so long. I have leaves in press & put in lengths.

It is curious the way it blooms. The patches that commenced flowering in February are now about done, other patches are just coming into flower, some of which I sent this morning with the seed-vessels.

I may as well own up that I was ambitious to work this thing up myself, and last year and the beginning of this season I had a theory which is now exploded! It was this, that the lighter-colored, stouter-branched, smoother-petaled was the southern form of versicolor and the taller darker-flowered with purple stems was another species, and that these two had

hybridized producing these curious vagrant forms that are neither one thing nor the other.

And then too, I was a little vexed from a misunderstanding - my own fault - in the receding of one of your first letters with regard to this Iris. I understood you to say that if it was 3-angled it must be versicolor or tripetalum, and as I had been telling my friends that I had got hold of a new Iris, I was a little chagrined and mortified to be so taken down. But on a more careful reading of your letter I found you said "of the described species", which put a new face on the whole thing, and so before I understood you I tried to be a little sarcastic, and said "this other thing, versicolor or tripetalum, how it does try

say. I shall certainly return
in the fall. These great roots
could hardly be sent by
mail. I have had two large
clumps moved to the garden
but they were taken up so
carefully with a great soil
of earth that they never
seemed to know they had
been moved and keep right
on flowering - the 6-angled
and the deep dark 3-angled.

The family will go north
in about a week, I think
I shall remain a month
later.

nothing about the nice water-
proof paper ^{or rather springy} in which I enclose
the packages, which I think
has as much to do in keeping
the specimens fresh as the
moss! This paper can be
procured in only one place
in New York at \$1.00 per
quint. I brought down 5-
quint.

Oh, yes, "pubescens" is
just the word, it expresses the
idea much better than
"slightly bearded". I noticed
also the deep division of the
stigmas, but as I had nothing
to compare with, and the books
were mostly silent on the sub-
ject I did not see the im-
portance of this as much as the
other characteristics.

As I said this morning,
Crinum amabile is in flower.
When I wrote you on the 2nd

of April the flower stalks
were not in sight. On the
3rd I was away all day among
the Iris, on the 4th it rained.
so there were two days that I
did not notice it. On the morning
of the 5th two flower stalks
had shot up, like Joel's
gourd, seemingly in one night
a foot or more high, they
developed rapidly, and on the
9th three flowers expanded,
yesterday the 10th 3 more ex-
panded, and to day, the 11th,
3 more will open. Those
that came out on the 9th are
far more beautiful today
than when they first opened.
There will be 13 flowers in all.
The two stems stand side by
side, ^{close together} one 6-flowered the
other 7-flowered. They are
26 inches high and the

flowers (of course including
the long tube) are about
10 inches long. It is the most
magnificent thing of its
kind I ever saw! The
lower leaves are from four
to five feet in length, and
would have been considerably
longer if we had protected
it from frost, they were all
cut off by frost close up
to the stem-like center, the
last night of November,
and we had several frosts
after this and no time was
it protected. "What have
you to say to this?"

Most sincerely yours
Mary Heath.

With regard to seedling Iris
now, will be just as you

A word more about this high tide. I do not mean a regular tide. (Twice since last November the St. Johns has been very high, there was nothing like it last year. I had a good opportunity of seeing just how high the water rises. At the foot of the garden (on three sides of the lower terrace) a wall has been built $3\frac{1}{2}$ feet high to keep the water at bay, on the top of this wall is a fence of short pickets or palings 15 inches high. When the tide is very low the ground is left bare around this wall. But in this last high tide, two weeks or so ago, the waves dashed over the pickets on the terrace, and it was fully a week before the water subsi-

deal, which has greatly interfered with my work, all the low grounds were flooded.

Three days ago the water had so subsided that I again resumed my work and have been in the field a large share of this time.

Now you can see how easily seeds could be carried to any reasonable distance should such a flood happen at the right time.

M. G.

Green Cove Spr., Colo.

April 13, 1877.

Dear Prof. Sargent -

I have concluded to send some roots of the Iris by mail. I have selected small plants growing in rather dry soil, mixed with saw-dust, about an old saw-mill. I think there would be more likely to live than the larger, stronger plants in rich soil. At all events it does not cost much to send them this way and if they die it will be no great loss. - I send two packages to give you a fair trial of growing it.

Sincerely Yours,

Mary Newb.

Green Cove Spring, Fla.
April 16, 1877

Dear Professor Sargent -

I am becoming impatient with regard to the fate of my 6-angled Iris! I sent you specimens of this on the 2nd of April, and a good supply on the 7th, and not one word have I heard from it.

Now I study this plant. Now I think it cannot be hexagona. The stamens even extend beyond the true stigmas, and the interior perianth is nearly twice as long as the large stigmas.

Did the specimens reach you so that you could see its manner of flowering? It is the only Iris I ever saw with nodding flowers. The great nodding flower-buds, just before they open measure from $5\frac{1}{2}$ to 6'

in length, and when the flowers expand they all bow down like Lilium Canadensis and superbum, but as they wither they begin to assume an upright position, so that the seed-pods are all erect just as in these lilies.

This Iris is rare, I have scoured the country in every direction for miles around wherever Iris would grow, and have found only one locality on this side of the river and one on the other side.

Truly yours
Mary Heath.

character of the leaf is just as marked to day as when first set out. The leaf of the late-flowering is much narrower, thicker and a different shade of green from the early-flowering.

This was not noticed by my friends until I called their attention to it, but now they recognize the plant by the leaf just as quickly as I do.

They only called it then early and late flowering *Osmundia* as they could see no difference in the flower, neither can I.

I have been pressing a good supply of sections of *Iris* flowers, I enclose some stigmas which show the foliaceous character and the true stigma beautifully. It is simply impossible to show any distinctive character in the usual way of pressing the flower of *Iris*.

Sincerely yours,
Mary Heath.

Green Cove Spring, Fla.
April 17, 1877.

Dear Professor Sargent -

Mons of April 16th received last evening. I have received a letter from you in ~~4~~⁴ days but this was 6 days on the way, so forgive me for my impatient letter of yesterday, for I see I have not allowed time enough for your decision on this 6-angled *Iris*! I send with this note two of the largest sect-units I could find, from which you can make your own cross-sections. Perhaps you will not call it 6-angled at all, the larger the capsule gets the more indistinct are the angles, and I can find plenty of unripe fruit of this other that looks as much 6-angled as this which I at first thought might be *hypogona*. My reason for jumping at the conclusion

that it was hepagona was its
6-angled character and the
crest, but as you have taken
away the crest from my other,
you may from this, for it is
no more crested than many
specimens of this other!

Now remark some
time since with regard to your
being glad that I had no
troubles with hepagona, did
not hurt at all, for you
simply misunderstood me.
I meant I had no trouble
with the species, let it be
hepagona or what it would,
it was always the same
gravel thing, not running off
into all sorts of shapes and
color like this other.

When you get through
with this species then I have
something else to take up.

With regard to Amaryllis
bulbs the place is all
under water, and it is simply

impossible for me to get them
personally. I can hire
a boy and show him how
to get them if you say so.

Last year I took them up
myself, and I can assure you
it is no easy job - growing as
they do among a network of woody
roots - a trout is no use, nothing
but the fingers following down
until you reach the bulb. I
completely used up two pairs
of buckskin gauntlets getting
those bulbs last year, a boy
will not have to be to this ex-
pense!

Strange that you can
see no difference in these leaves
between the early and late flower-
ing Amaryllis. Have you the
late flowering from this region?
I do not remember to have
sent you the late.

Well, at all events, they
have been growing here in
the garden side by side for
the last ten years and the

unusual.

No. 7 - a large patch -
has not yet come into flower.

The family - servants
and all - leave for the north
to-morrow. My friends have
scolded and coaxed by turns
about my remaining behind,
but how can I leave with all
this Iris on my hands! Of
course it will be much more
difficult for me to pursue
my investigations after they
are gone - the boats will be
removed from the water today
and the horse is already gone,
but I have my hands and feet
and more strength than last
year.

One of the servants - a Ger-
man - who has often accompanied
me in my excursions has just
brought me a Creamy white flower
of Iris. No leaves simply the
flower stem - the petals are not
pubescent. As soon as I snail
this and the two perhaps of roots I'm
off for this Iris. No morrow I will
snail roots of No. 1. May 1877.

Green Cove Spring, Fla.
April 23, 1877.

My dear Professor Sargent -

Yours of April 17 is at
hand. I am disappointed that
you make my grand 6-angled
Iris Walker's hexagon! I do wish
you could see it growing, then
I think you would change your
mind. - I have another 6-angled
Iris (we will call this No. 6.)
which I think is the true hex-
agon. The stems are shorter
and stouter, and I fancy the
leaves are not of so fine a
texture. The flowers are erect
and not nearly so large, and
of a deeper brighter blue. The
silky bracts are not so fine
in texture, indeed, the bracts
would hardly be noticed as
differing much from those of
other Iris. - I have but just
found this No. 6. on this side of
the river, in abundance, and
shall have ample material to

mostly upon.

I enclose the large capsules of this No. 6. in the package with the small No. 5. The capsules of this, as you will see, are decidedly 6-angled, and it fruits well, while ~~that~~, not one stem in five of No. 1, will produce a single capsule.

I have shown this grand, nodding flowered No. 1. Iris to many visitors, and to all the intelligent ^{natives} with whom I have come in contact, and no person as far as I can learn had ever seen it until I brought it to light. — I have a good supply of pressed specimens showing the young flower buds encased in their silky bracts — the nodding flowers and the erect and erecting fruit, all of which I will soon send to Dr. Gray, as that was his instructions last year, to send dried plants to him and living to you.

Of course I am delighted

if you make three distinct species of the 3-angled Iris, which I thought only marked varieties of the large. I have gathered specimens of the grass-like leaved No. 4. in ~~different~~ as widely different localities as I could find, on opposite sides of the broad stream "Governor's Creek", so as to give you a good idea of its general appearance. It does not grow in clumps but scattered about. It is entirely out of flower and does not seed well. I send as good capsules as I could find which you will find in the package with the roots.

You will find a few flower buds of the small No. 5, but this also is nearly out of flower, it does not hold on like the large one.

I have flowering stems of what you call the type - No. 2, now in press nearly 5 feet in length and this height is not

conditions, and all those that ^{are not} are left in the damp dark ^{will be} ^{grass-leaved}. I will try it here, and you please see what becomes of those sent to the Garden.

I send with this now some ^{of the} ^{best} ^{flowers} of the Iris to show the form and color of the two larger forms. Also a flower all of its parts in twos, there were five flowers on the stem - all in twos. Is it not quite a freak?

I will send Herbarium specimens before long.

With sincere thanks for your kind and instructive note I am,

Yours sincerely,

Mary Treat.

Plenty of *hepagona* was also growing in these great beds, so some of the seedlings may

Green Pond Spring, Cal.
April 24, 1877.

Dear Professor Watson -

Your kind favor of the 17th inst. was received last evening. Of course no one could be more delighted than myself if you can make a species of ^{the} 3-angled Iris.

I hope you have seen the little seedlings sent to Professor Sargent, and now allow me to tell what I think, I know facts - and the only thing wanted, but I can't wait for those seedlings to grow before I tell what I think!

The first locality in which I found the grass-leaved Iris seemed to be cut off from all communication

very much perhaps - I do not mean that this would be *hepagona*.

with any other. It was growing
in dark damp woods, and no
other Iris grew on that side
of the creek (about fifty feet
wide), for a long distance.

This puzzled me until yesterday
when I came across those little
seedlings in dark damp woods
quite a long distance from
the great Iris beds which are
near the muddy shores of the
St. Johns. The only way I
can account for these seedlings
so far away from the muddy
beds is for the seed to have
washed there in a high tide
or freshet. And now this grass-
leaved Iris growing in this
comparatively dry, ^{soil} and dark
woods would it not account
for its slender leaves and its
isolated habits? There was
no grass leaved Iris when

these seedlings were growing,
but less than half a mile
distant there was plenty, but
it does not seed well, and
from its position it could
hardly have been washed to
where the seedlings were grow-
ing, whereas, a very high tide
and rain could so flood the
low woods that seeds could
be easily brought from the
mucky beds.

(Where I first found
this ^{grass-leaved} Iris great beds of the
large 3-angled Iris were growing
on the opposite side of the
creek, and a high tide with
the St. Johns effects the creeks
so that the banks are often
overflowed and the Iris seed
could be washed to the oppo-
site side. I am almost con-
vinced that these seedlings can
be made into the broad ^{large} leaved
Iris by giving them the right

flowers, very delicate in texture
and when pure as difficult
to press as Nemastylis. It is
very unlike the New Jersey
Persicolar, yet the capsules look
more like those of Persicolar
than either of the others.

The slender species (No. 3.)
with darker colored stems and
flowers, leaves often 4 feet
in length, and when pure it
has a clear-cut, clearly defined
3-angled capsule.

I believe I have not
sent you specimens of the
pine-barren Iris, believing it
to be only a form of this
in the great marshy beds
along the St. Johns. In a
day or two I will send you this.

But you must send me
some new stamps, for if I
keep on much longer, I shall
not have money enough left to
reach home. Truly yours
Mary Math.

Green Cove Spring, Fla.,
April 27, 1877.

My dear Professor Sargent -

I send you today two
packages of Iris to show how a
hybrid has been produced
by the union of the slender 3-angled
(No. 3.) Iris with the 6-angled
hexagona. The hybrids I have
tied together, you will see a
6-angled capsule on a stem
that should produce a 3-angled
one! (What a pity that I did
not find these great beds ear-
lier to note the curious effects
upon the flowers as well as
the capsules. But I have a
few of the curious flowers in
press which will make good
herbarium specimens.

About 3 miles from
this bed, of which I now send
specimens, is another great
patch-acres in extent - here

Sagittaria has ~~hybridized~~
mixed with the broad-leaved
broad-petaled, lighter-colored
3-angled *Iris* No. 2, but the
effects of this union are not
quite so apparent, as the
stems of both species are
stout and nearly of the same
height, and the capsule of this
species is not so clearly 3-angled.

Most of the hybrids do
not seed well, the ovaries grow
for a time, then turn yellow
and drop from the stem. Some
of these partially developed
capsules dropped from the
stems while I was collecting
the specimens, which I enclose
in a paper in one of the pack-
ages. - Now things begin to
have a little shape, and look
more clear than they have
heretofore. I am now convinced
that the two species of 3-angled

Iris have produced hybrids
just as I at first thought,
and then abandoned the idea
for a time.

Evidently there are three
species of large 3-angled *Iris*
and two 6-angled. Heretofore
I had considered one of these
large species only a form of the
others. This I will call the
pine-barren *Iris* (as I have
found it only in the pine-barren
swamps and ponds). I now
think it a distinct and well-
behaved species, tall and strong
with rather rigid leaves and
stems, capsules short and round-
ish. - The species which in
my notes I call No. 2, and
what I at first took for the
southern form of *versicolor*,
has broad large leaves (of which
I sent the first specimen in a
letter) and large light-colored

Green Cove Spring, Fla.

May 7, 1879.

My dear Dr. Gray -

Professor Riley has made a pretty mess of it!

I sent him nearly two months ago two small bees for names which I thought cross-fertilized Pingucula, and now comes a note saying, "The minute yellow specimens which you think pollinize Pingucula are a species of Thrips". I did not even know there was a "minute yellow specimen" in the deal. I suppose they were on the flower, for I dropped a flower with a bee in it, in alcohol. But I will enclose his note that you may see his mistake.

I hope you have received the Herbarium specimens of No. 1. *Lupagomus*.

After a careful study of the two plants which I had designated as No. 1, and No. 6, I cannot see differences enough to make them distinct. The stem, leaf and root are the same in both plants. The only difference is the stem is taller and more slender in No. 1 than in No. 6, and the flower is larger in No. 1, and the swelling character is no doubt caused by the weight of the large bud - the pedicel being too slender to hold it up.

I can assure you that I did want this

grand *Iris* to be distinct, I cared more for it than all the others, but I suppose it can only be a variety at most, and perhaps even this tall slender habit will disappear with different soil and culture. I ~~had~~ had a large clump of it moved to the garden so carefully that it went on blooming just as freely as in the shady woods.

I await with much interest the decision on this plant.

Most sincerely yours,
Mary Treat.

Green Cove Spring, Fla.

May 10, 1877.

My dear Professor Sargent -

Several packages
have gone, since I have heard
from you, still, I send
another to-day, which I
cannot place. The root, cap-
sule and flower are entirely
unlike the 3-angled No. 3,
and quite unlike the broad-
leaved broad-petaled, light-
blue flower of No. 2. But
unlike as it is, it is nearer
No. 2. than any of the others.

I enclose some of the flower
buds which I think will
open.

I am afraid we are
mixing things. My No. 3. is
not the slender purple-stemmed
one, with simple scape found

on the road-side, and called
by Mr. Watson a distinct
species. My No. 3. has very
different roots and tall
branching stems, and leaves
often more than four feet
in length. I sent stems of this
with what I called the
6-angled hybrid.

I hope Dr. Gray received
the Herbarium specimens of
No. 1. I now have Herbarium
specimens ready of the others—
that is of No's 2, 3, 4, and 5
and also the Pine-barren Iris
and the shorter stemmed, smaller
flowered hepagona.

I enclose a rude sketch
of the Iris beds in which I
am at work. — Yesterday I
had a chill and fever, which
is not very encouraging.

Sincerely yours
Mary Neal.

Lato Ameryllis

East shore of St. Johns.

*Pine barren
Iris*

*St. Johns
Iris*

*Great Iris bed.
hepagona scattered all along with
Iris at lower other species.*

*Corn-covered
with yellow-*Symphaca*-
no other plant.*

South

Iris home

Iris

East of Governor's creek

Barly Ameryllis

Mt.

*"Yellow
Symphaca
at the mouth
of Governor's
creek.*

From the point marked "home" to Governor's creek is a high dry walk of about a mile; just before we reach the mouth of the creek is a low spot running back from the river, and here is quite a large Iris bed, and where the 6-angled hybrid is found, mixed up with *hepagona* and with the slender 3-angled No. 3. But I have also found this hybrid in the bed at home, and no *hepagona* that of a mile. Of course this "great bed", miles in extent, I have not explored thoroughly, but I have spent many days there.

Mary Mt.

trifolium? It evidently flowered
late in the season and had a
tall slender smooth scape.

I hope when I reach
Vineland to find a letter
awaiting me there.

Sincerely yours,
Mary Mead.

Green Cove Spring, Fla.

May 14, 1877.

My dear Professor Sargent-

News of May 8th with
the \$5 enclosed is received,
Thanks. The stamps also
came safely.

Now say the
last two packages came by
express, I had sent no
packages by express, but all
by mail. Now make no
mention of the two large pack-
ages sent on the 26th of April
containing two species of Iris-
No. 6 and the Tall No. 3 and
the hybrid No. 7. I call it
a hybrid because I do not
know where to place it. It
cannot be a form of hepazoma,
neither a form of No. 3. If a
form of anything it must be
No. 2. And poor No. 2 has

most forms saddled upon
it ~~has~~ already, than rightly
belong to it I fear!

I have now ready
Herbarium specimens of
No's 2, 3, 4, 5, and 6, and the
fine barren Iris, together
with one of the most marked
forms of No. 2.

I have taken special
pains to press the flowers of
No. 2, which I supposed
to be the southern form
of versicolor. As soon as
I reach Vineland I will
send specimens from there.

The region about Vineland
is a good one for Iris, both
versicolor and virginica grow
there, and we also have
growing in the garden,
procured from the Florists,
a large yellow Iris, and

gramineæ and pusilla and
germanica, and I
suppose a form of germanica,
with large pearl-colored
flowers.

My work with the
Iris here, for the last ten
days, has not amounted
to much. These terrible
chills and fever have put
me where I do not care
~~whether~~ much for Iris or
anything else. I start for
the north on the 22nd.

The work here among
the Iris is just fairly com-
menced. I shall know
another year where to look
for all the forms, and go
about the work much
more systematically.

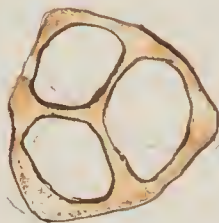
The plant which
you think may be a pyris,
may it not be Pleaca ten



No. 2. - Stems branched.
Branches 2-3-flowered.

May 24

May 24



"form of No. II (most) with simple
stems."



Madison, Wis., Dec. 29/24.

Dear Dr. Gray:

Though I know that your time is very fully occupied, I venture to write about a matter that interests me very much just now. I. E. — What is the morphological nature of the sub-petiole spines of Ribes? They are cortical in their origin, without fibro-vascular connections; but I scarcely know whether they are to be called trichomes or foliar organs, springing by chorisis. I should be inclined to the former view if it were not for their intimate connection with the subpetiolar ridges that I fancy I have seen called stipules somewhere. If you will kindly give me your opinion on them I shall be greatly obliged.

Mrs. Trelease joins me in kind regards to Mrs. Gray and yourself.

Very truly,

Thos. Trelease

WISCONSIN STATE HORTICULTURAL SOCIETY.

Madison, Wis., June 12 1885.

Dear Dr. Gay:

As I wrote you some weeks ago, I visited St. Louis at Mr. Shaw's invitation and passed a couple of days very pleasantly at the garden meeting Mr. Elion for a short time one day. The Directors of the University, as I learn from Mr. Elion, met on Monday and established the department, and have offered me the professorship. While I am uncertain about one or two details, I think there can be little doubt but that I shall fill the very promising position that has been opened to me through your kindness.

If I leave Madison, I feel considerable responsibility concerning my department here, which is in a very prosperous condition.

WISCONSIN STATE HORTICULTURAL SOCIETY.

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Naturally, I wish to have it even better ~~of~~ than it is now. My first choice would be Prof. Dudley, of Cornell, provided he can be induced to come over, which is doubtful. From the little I have seen of Mr. Reymon I have taken a strong liking to him, and if he is competent to fill the place I should like to secure it for him, if Dudley will not take it. Not knowing him well enough to recommend him myself, I write you to ask your opinion, having written Dr. Sargent by the same mail. If you consider him capable of assuming the head of a department will you kindly write me at once, as our agents meet in a trifle over a week.

Please remember me kindly to Mrs. Gay.

Very truly,
Wm. Trelease.

Madison, Wis., June 27, 1885.

Dear Dr. Gray:

The matter is at length settled, and I am to go to St. Louis next fall. I feel sorry to leave Madison for many reasons, not the least of them being that my department here is going to suffer seriously by any change. After giving the subject a good deal of thought, I have recommended Seymour for trial one year as Assistant Professor. For I have more confidence in him than in any other available man. I want him to come with the understanding that he is on trial for a year; that he will be dropped then unless competent to assume a full professorship; and I want him to insist now on that promotion if he is satisfactory. - otherwise the department goes back several years.

Can't you fire the new School of Botany, and its professorship (which I am delighted to find named for you) a nice notice in Science?

Respectfully, Wm. Grease.

THE SHAW SCHOOL OF BOTANY.

WM. TRELEASE, PROFESSOR IN CHARGE.

St. Louis, Mo., Sept. 25, 1885.

Dear Dr. Gray:

Now that I am getting settled in St. Louis - though by no means well at work yet - I want to write you about something that I have had in mind since spring, when Mr. Shaw told me that he had had some conversation with you regarding the publication of Dr. Engelman's writings in a compact and convenient form. So much drudgery must of necessity be done in an undertaking of this sort, that I should like to relieve you of as much of it as possible, and, if you like, will gladly do all of the work that you wish to entrust to me. At any rate, if you will kindly tell me what your plans are, I can hope to be of some use in one way or other.

Judging from present appearances, the opportunities for work are greater than the prospects for an adequate number of advanced students - or, for that matter, of students of any grade; but I hope we shall get them in time. In this respect the University is of comparatively little help, as it can only spare one class of beginners two hours a week.

In order to be where I can use the garden fully, and see Mr. Shaw frequently, I have located in the library of the Museum building, where I expect to dig most of the time. By the way, a little influence ought to be brought to bear on Dr. Engelman, with reference to his father's Herbarium. Some time since the duplicates of the collection were sent to the garden, but, as I

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understand, he could not quite
reign himself to seeing his
father's personal collection
leave the house. However, the
herbarium is too valuable to be
kept in a private house, where
it is not readily accessible;
and, in my estimation, is ought
moreover to be where it will be
properly looked after and where
it is safe from fire — all of
which points constitute argu-
ments for its transfer to the
fireproof building at the garden.
I hope, too, that as collections
come up, we may be re-
membered at Cambridge, for
I am anxious that every possi-
bility shall be utilized to make
the new school what we all hope
it is to be.

Mrs. I release joins
me in kind regards to Mrs.
Gray and yourself.

My truly,

Mrs. I release.

THE SHAW SCHOOL OF BOTANY.

WM. TRELEASE, PROFESSOR IN CHARGE.

St. Louis, Mo., Dec. 12, 1885

Dear Dr. Gray:

I suppose the little orchid enclosed is Epipactis helleborine, is it not? though I have no very satisfactory description at hand & no figure nor herbarium specimen. The specimen is one of three, found in Madison this summer, and though poor will serve for identification, supplemented by the sketches I enclose, which I should like to put with my specimen if you will kindly return them when through with them. From its occurrence in Wisconsin as well as N.Y. (if I am right in my determination) I should expect it to be found anywhere in the Northern States - rare as it is.

Let me thank you for your thoughtfulness in laying aside the fine lot of plants you speak of.

I don't know when I can claim
it, - not now, but within a year,
I hope. Mr. Shaw was not very
receptive when I mentioned the
desirability of case room - thinks
the stuffed animals would be
crowded if we invaded the gal-
lery of the museum - and so I
let the matter drop, but put
him in the way of reading De-
Candolle's opinion on herbaria!
I foresee that I shall have to
take things very moderately, but
by falling back in good order
when I see I can't carry on
fairly, and renewing the attack
whenever more favorable op-
portunities occur I think I shall
get what I want in the long run.
Mr. Shaw certainly wants to do
something unusually good, but
as you know his idea of botany
is different from ours, and I
sometimes think a sprinkling

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of gray in my wig would make my suggestions more convincing. However, I console myself with the thought that I probably have more patience than an older man, and so in the long run may come out more certain.

Dr. Engelmann called on us with his wife a few evenings ago - presumably after hearing from you. They live across the street from us. I see that he is a little resentful toward Mr. Shaw for not esteeming his father's herbarium more highly and making haste to secure it by properly arranging to case it. He Dr. seems to think we should have iron cases, such as those used for zoological cabinets but

shelves & otherwise adapted to
herbarium purposes. I am a
little afraid those will not be
forthcoming, but hope for a
compromise on suitable wood
cases in the museum building,
with the hope that ultimately,
when we have a ^{laboratory} ~~muscular~~
building put up he can be
satisfied in this regard. But
meantime what am I to do
for an herbarium?

I hardly know what to say
about coming East this winter.
I want very much to help you
and know, too, that I should get
my much benefit from being
with you as much as I should
be in doing this work, yet a
decision is not easy. I am
obliged to be in Madison on horti-
cultural work the first week in
February, and have one class
up to about that time. Then

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comes an intermission of ~~not~~
to exceed 8 weeks. A week of this
time would be lost in going and
returning. Could I be of ~~any~~
sufficient assistance in the
7 weeks we could count on
to pay for going on? If so I
will gladly try to do it.

What do you think of
this plan for this year's work out-
side of the University? - In a fort-
night or so I shall give a short
address on the general sub-
ject of botanical schools, gardens
&c. at an inaugural evening
in Memorial Hall. and shall follow
it up by one evening lecture a
week for the month, free, with
the use of the lantern, taking the
subject of insects & flowers, as I
presented in at Baltimore two

years ago. - It is to get us
right class of people inter-
ested. Then try and organize a
class in ferns and grasses - two
interesting groups, yet difficult
enough to make instruction
desirable - to meet 2 or 3 after-
noons a week till mid winter.
In the spring I should like to or-
ganize an elementary class - for
analytical work, taking them with
or without preparation and giving them
the necessary vocabulary as we dis-
sect, in a body, common plants
representing as many orders as
possible, giving them hints on the
raison d'être of the different struc-
tures we find. I think this would
prove as useful as any lecture work,
and excite more enthusiasm, while
outside reading would be open to begin-
ners.

Please remember me
kindly to Mrs. Gray. Very truly,
Wm. Y. Galloway

St. Louis, Mo., Dec. 24... 1885.

Dear Dr. Gray:

Thanks for the identification of my notes, my trouble in placing it came from considering the antithesis.

Since writing you last, I have made one step, though a small one. On Mr. Chan's suggestion that the animals might perhaps be condensed, I yesterday cleared the cases of one half the gallery, by that means, so that it is possible to count on that amount of space, which may be sufficient for arranging the Engelmann Herbarium, I shall see. Now comes the question of having the vacated cases remodelled, I fear that Mr. Shaw will oppose that, as destroying the symmetry of the building and an item of additional expense, but it may be possible. With his permission, I could set the thing. Carpenter at work any day. I also have

his consent to condense the things
on the shelves downstairs, and by
putting in a system of stepped shelves
between each two of those now in the
cases, I shall make room for the Engel-
mann woods, acorns, cones &c.
Though they cannot show much in high
wall cases, and for that reason will
not add to the value of the museum
for sight-seers, my friend, they will
be systematically arranged, and ac-
cessible for study.

Since I wrote you, I have tried
to make arrangements for canceling
my February engagement in Madison,
and think it can be done. If so, could
you not still edit the Engelmann
reprint? In that case I could be in
"Cambridge a few days after Newyears, & stay
till the first of April or thereabouts. Dr.
Ellis Strong, favors this plan, and I am
sure that it will disappoint Mr. Shaw,
and, I fear, Dr. Engelmann, if you
cannot see it through. Until

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I hear from you again & it is a
great treat to speak to Mr. Shaw
about this.

Many thanks for your
thoughtfulness in sending a
line to Miss Briggs. I delivered
it the next evening, but was
unable to see her. She and Miss
Brooks called on my wife the fol-
lowing day, so I shall have the
pleasure of meeting her soon.
Mrs. Trelease thinks her very
agreeable.

Please let me know what
you think about the possibility of
still editing the book, with the 12
weeks' time I could give, and I will
make my plans according to your
wishes. Mrs. T. joins me in
kind regards to Mr. L. and yourself.
Very truly, Wm. Trelease

THE SHAW SCHOOL OF BOTANY.

WM. TRELEASE, PROFESSOR IN CHARGE.

St. Louis, Mo., Nov. 28, 1885.

Dear Dr. L., say:

I am very much obliged for your letter of the 24th. If it had been a good plain criticism it would have been welcome: as a criticism changed into a compliment it is doubly so.

Mrs. Trelease and I are making our preparations for going East, and expect to reach Cambridge on or about Jan. 6. We can stay till about the first of April. Can you suggest a pleasant, quiet boarding place convenient to the Garden? I am afraid we can not be accommodated in the very pleasant family we stopped with during the summer.

We have a very enthusiastic class of 18 ladies at work on flasses, who are doing good work. As several of them are leaders

of intellectual fashions. I
see in this class, which is all
an laboratory, can accommo-
date, a forerunner of a very good
class next fall. Our spring class
in analysis, at the Garden, prom-
ises to be not only good but large.

I send this week's Spectator
because I think that you will be
glad to see that your advice in re-
gard to popular lectures is not wholly
unheeded.

It would have given me a
great deal of pleasure to have been
able to drop in and pay my respects
on your birthday, which I learn
from your letter to me. I have now
so pleasant an occasion in every
way.

Mr. Gallaud joins me in
sincere regards.

Yours,

Wm. Gallaud.

St. Louis, Mo., June 5, 1886.

Dear Dr. Gray:

I thank you very much for examining the Composites for me.

Yesterday I spoke to Mr. Shaw about my proposed western trip, and he at once suggested the possibility of going to you next winter if I could be spared from my classes. I think I can arrange that, having your approval and his. I think it will be as well not to have frog sent while I am away, & will be gone on the winter now at once on my return. But they are sending no frog at all now. Have they not begun on the cult. of P. R. R.? I shall be about for a fortnight yet

and it is desirable for this
last part of the work to be
rushed through so that I
can be with you for the
very troublesome miscellanea
at end. The ~~expense~~ is
counting up, I see. There
are two more plates to come
than I ordered - Agave shawii.
They are direct-process & will
come rather high. Can we
afford this portrait? Would
you consider it desirable?
It is for the memorial No. of
Trans. St. L. Acad. now printing,
and can be had ready for
insertion for 40cts. a copy
(\$10. or possibly \$15. for the 250 needed).
Please let me know what you
think.

Mrs. Trelease joins me in
kindest regards to Mrs. Lutz &
Journey. *Very truly,*
Thos. Trelease.

THE SHAW SCHOOL OF BOTANY.

WM. TRELEASE, PROFESSOR IN CHARGE.

St. Louis, Mo., July 24 1888

Dear Gray

I enclose a letter from the
 a type man the I wish forwarded
 act, to of you are for the pictures
 my own description in to type &
 of of paper etc. I found
 speaking to the Engelman that
 he had not thought of using photo-
 graphs for the book. As I understand
 him the 11-12 pictures referring
 to a life-size head for your bio-
 graphic. Perhaps it would be
 well to consult with him before
 deciding.

My address for the summer will
 be as above, my summer will forward
 my name. I am not in the country,
 but will be at the table next week.

With very best regards to the family,
 I have the
 Very truly yours
 Wm. Trelease

Madison, Wis.

~~St. Louis, Mo.,~~ July 26 1886

Dear Dr. Gray:

I am safely back, after a somewhat shorter trip than I had at first planned, - but a very profitable one in many ways.

Now I am ready to read frog just as fast as they will send it to me, and shall be glad on Mr. Shaw's account to know that the book is going along. I would gladly come on for 6 or 8 weeks, but really cannot afford to do so, nor will my wife give me another "leave of absence" this summer. I shall be here till Sept. 15.

I trust that you have gotten rid of your cough, & are otherwise well. Faithfully, Wm. Trelease

Don't know what not

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., 11 / 24 1886.

Dear Dr. Gray:

Do not let the reprint work annoy you, but stop is when the quarrel is reached. I will be with you about two years, probably, for the balance of the winter, at any rate long enough to finish up "copy" for the troublesome parts. I should be sorry to see the smaller notes dropped, but we can talk that over when I reach Cambridge.

As to expenses: - I should, of course, like to save my traveling expenses, but knowing that we must exceed the original estimate of publication cost, I think we had best save the item of expense of editing.

In haste,

Wm. Trelease

I mail you copies of Thalictrum paper for Hooker & Dr. Sandell. When you are sending.

The Shaw School of Botany,

William Trelease,

Professor in Charge.

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I am just finishing up my
work on Rhamnaceae, and should
very much like to see again
Ceanothus & Crataegus, and
C. integrifolius + var. paniculatus.
If it is not asking altogether
too much, will you please
send these to me right away?
They can go back in the box
with the others, which will
be returned in a few days af-
ter I see these. I wish, too,
that you would lay my MS
of Ceanothus in with the speci-
mens.

Mr. Egner handed me some
grapes for potpourri. They will
do with these, unless you wish
me to work over Vitis. — not a
pleasant task.

St. Louis, Mo., 4 / 2 1887.

Dear Dr. Gray:

Your proofs and letter came yesterday, and I succeeded in seeing Mr. Shaw this noon. I return the only corrected proofs. Mr. Shaw approves of the preface.

Mr. Shaw has asked me to request you to furnish him with a mailing-list of those you think the volume ought to go to. Personally, I should like Baron Fred. von Mueller and Hon. Isidor Bush to be included. Mr. Shaw would like you to have 200 copies sent here, unbound, from which he will supply Dr. Engelmann with 25. The remaining 50 can be left in Mr. Watson's care or placed on sale in any way you may judge best.

It seems that Mr. Shaw did not understand that the cost would be so high as it really is, say \$1000. or over, but he tells me that if you will kindly send him a memorandum showing the items already paid out, Mr. Wilson's bill for the remainder may be sent directly to him, in your absence. I would suggest that as Mr. Wilson knows now exactly how much is to be done, his bill, payable on delivery of the edition, might be drawn up now. - 5

C. I'd like you before you sail. Mr. & Mrs. are
well when understood that it has been
submitted to you and is correct.

Mrs. Oakes writes me from Mad-
ison that she stood her journey very well
and is in unusually good health. She
joins with me in wishing Mr. & Mrs. and your-
self a very pleasant summer and a
safe return. May I now hope for a card from
you as you are sailing, letting me know
how you are? If I may, now how
to reach you, I shall hope to have oc-
casion to write you occasionally.

Very truly,

Thos. Oakes.

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., 4/26 1887

Dear Mr. Watson:

I want to thank you for the packet of *Ilex*, which I know is at the Garden, though I have not been out to get it yet. I am very glad, too, of the ripe fruit of the Mexican *Polygala*, enclosed in your letter.

Dr. Engelmann kept *Agave Binglei* in a distinct species cover from *A. deserti*, otherwise I have no evidence further than his labels, which state about what Mr. Bingle mentions. The divisions of the perianth are narrower than in *A. deserti*, & therefore in a rather superficial examination, I see little difference.

Very truly,

Wm. Trelease



The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., 6/4 1887

Dear Mr. Watson:

I return to you the Illiciaceae
which I hope will reach you safely.
I am greatly obliged for the privilege
of using them. I have laid in
with them on Pisycnischium.
Would you mind mailing them
for me & returning later?

I am going over Boerhaavia
ceae, now, with all the Engel-
mann drawings, notes & ma-
terial. If you have any in-
structive specimens since a
publication of Bot. Calif. I should
be very glad to see them. May I
trouble you to send me at Madison,
Wis., your N. A. Clastaceae, if they
can be spared and you are willing
I should study them? I am anxious to
go on with orders near Illiciaceae. I
leave for Madison tonight. Very truly,
Wm. Trelease.

Just to Prof. Trelease, Madison,
Wisconsin, all our *Euonymus*,
Celastrus, *Pachystima*, *Schaffneria*,
Myrica, *Hippocrepis*, *Maytenus*,
Monarda, & *Celosia*.

June 15/87

S.W.

Returned Aug. 17/87

The Shaw School of Botany,

William Trelease,

Professor in Charge.

Madison, Wis.

St. Louis, Mo.,

8/5

1887

Thanks for the
welcome from Dr. Engelm.
& for congratulations,
Mrs. T. & the baby are
doing very nicely!

Dear Mr. Watson:

I have just opened the Banquette box, which
came a couple of days since, and find it ap-
parently all right. I shall begin on the ferns on
Monday. I am boxing Celastraceae this morning
and will get it off by express on Monday. I hope
you have not been anxious about the parcel:
just after writing you last I ran up into the
region about Marquette for 3 weeks, so that I have
just got to the end of the Order. The species are
come out right except that I have made a new
species of Euonymus. Glossopetalon is not
clear to me at all. I cannot make Nevadense
come out once from spinosus yet: leaf form and
pubescence are both too variable. But Dr. Engelm's Grand
Canyon specimen ought to be distinct in its large
flowers with 20 stamens on the disk. (When Capri-
dulae are taken up this genus will have to be gone over.)

Thanks for your "Contributions".

Very truly,

(Wm) Trelease

The Shaw School of Botany,

William Trelease,

Professor in Charge.

Madison, Wis.
St. Louis, Mo., Sept. 6 1887.

Dear Mr. Watson:

I will write you more fully about the Engelman reprint from St. Louis. - we go tomorrow. Dr. Seng's idea was to place the 50 copies on sale at the Herbarium, on some arrangement similar to that for Syn. Fl., if you will kindly undertake to handle them. I believe that we decided to sell them at \$10.00 each, in sheets; but I should like to confer with Mr. Shaw before they are offered for sale.

I return the Canotus box by express, prepaid, and trust that it will reach you in good condition. I have gone over the specimens several times, very carefully, and do not see how I can improve on your arrangement except for one or two trifling changes in sequence of species; but C. dentatus is, to my mind, closely enough related to papillosus to Warren & its insertion after that species. What I have called Parryi will doubtless prove to be Heitchianus, but I must leave the name to you with icons to you; I hope to hear from Parry in

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., 188.....

The specimen, in the divaricatus form is a
fuzzling specimen apparently of the same group,
but I can make nothing of it. Louis's large plant
ought to be near velutinus, and I have not dared to
make anything else of it, notwithstanding its size;
can it be distinct, to go by the side of thyrseiflorus? The
twigs are a little pubescent.

I am very much obliged for the opportunity
to study the specimens, and have put my notes
in form for the Gleaner, and enclose a copy with the
specimens, in case you do not have time to work
them over again. But it will be much gained
to you for you to prepare "copy", and you are sure
come to anything in my notes that you can use,
if you will do so.

If you can send me more of the Tran-
haceae (to 1724 Washington Ave., St. Louis) I am soon with
them at once.

I enclose in the box a blue-print of my old
work-book here.

Yours,

(The Director)

St. Louis, Mo., 9/30 1887.

Dear Mr. Watson:

I have just fine our Caucanthus again, in looking up Martindale's specimens, and can make nothing at all out of Palmer's no. 42, San Diego Co. 1875, which was distributed as C. divaricatus; so I have called it C. ~~Ranji~~ Palmeri. It ought to follow what I have called C. Ranji. I enclose the two descriptions to go in my notes as indicated. Please cancel the arborescent character in "C" before C. thyrsiflorus and in description of that species if it is mentioned there; as, also, any reference to C. arbores in C. velutinus (if any was made).

The copies of Engelmann papers you have will have to be held till the presentation copies are out; then I will write you.

I can go on with Rhamnaeae if you can spare a part of the family.

Yours in haste,

Wm. D. Allen.

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., Jan. 6 1885.

Dear Mr. Watson:

I have just put up the Rhamnaceae for shipment by express, in two boxes, and have included Eggert's grapes, which he sends with his compliments.

Several of the species that were in wrong covers have been marked and placed with the "inserendae", as I did not care to take the responsibility of putting them elsewhere. After going through several large collections, I have come to the conclusion that Ceanothus vermicosus and C. macrocarpus will stand. In my first notes, I separated them as varieties, but have now restored them. C. parvifolius bothers me yet. Some forms may very likely take in what I have called C. Palmeri, but I can't quite make them fit together yet. What I at first called C. laurifolia is, almost certainly to my mind, C. Veitchianus, as I suspected then. I have seen the Philadelphia type of Rhamnus olifolia, which is certainly R. Californica, not

St. Louis, Mo., 188.....

R. insularis, as I have suspected? The more I see of Ceanothus cuneatus &c., the less certain I am that the intermediate forms are not mainly hybrids. It is said that the French hybrid C. Americanus & the blue flowered Pac. Coast species, and I can explain Howell's plant & one or two others in no other way.

I hesitate to write about something that has been constantly in my mind since the first of Dr. Goss's illness, but in returning this Order I cannot very well avoid it: - that is, my work for the Flera. It looks as if the task of completing the work must largely fall to you, and I am by no means certain that I can satisfy you in the work that I am trying to do. If not, will you kindly tell me so, plainly? You need have no fear of offending me, and I have no wish to in any way force myself on you in

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., _____

188_____

the work. But if I can be of use
and you wish my help, I can
say to you as I did to Dr. Eng, that
I will gladly do the best I can.
For I know that he desired very much
the early completion of the work. I
cannot believe that he was not to
have at least his mind, for a
considerable part of it yet; but so
much of the responsibility must
fall to you, - that I write to learn
your wishes before going any further.
And I have hope to hear from you
when you find leisure to write.

Very truly,

Wm. Trelease

The Shaw School of Botany,

William Trelease,

Professor in Charge.

11

St. Louis, Mo., Jun. 13 1888

Send to Henry Shaw, Esq.,

7 + 8 West 11th St., St. Louis.

Dear Mr. Watson:

In speaking of the Engelmann affair the other day, Mr. Shaw suggested that I ask you to forward to him the fifty copies that are at the Herbarium. I believe it is his intention to place most of the copies for sale in the hands of a St. Louis house and of Putnam or some other London house.

I am very sorry that you have been burdened with them, and hope that the shipment will not cause you much additional trouble.

Gailon writes very discouraging news from Dr. Long. It must be very hard for poor Malin.

Yours, Wm. Trelease.

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., Feb. 23, 1888.

Dear Mr. Watson:

Now that you are getting settled at the work about the herbarium again, I write to ask if you will not kindly send me the set of Curling Toad specimens that Dr. Gray showed me two years ago, as laid out for us. I have left them altogether too long in your care; but we can go to work at mounting them now if they are sent on. If, as I remember, they make a large box full, they had better come by fast freight, to avoid the high express charges.

I have done nothing at systematic work since Dr. Gray's death, - in fact since the beginning of his illness. Somehow the work isn't as pleasant as it was. You probably have the same feeling to a greater degree.

Mr. Trelease joins me in kind regards, and I shall be greatly obliged if you will tell Mr. Gray that we think of him very often.

Wm. Shaw received the
Engraved name Books. }
Very truly,
Wm. Trelease;

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., 3/17. 1888.

Dear Mr. Watson:

On behalf of the School of Botany, I wish to thank you acknowledge the receipt of the 3 boxes of Curling Jack plants shipped Mar. 2. Due acknowledgement will be made when the first report on the herbarium is printed.

I enclose postal note for \$2.20, the amt. of expense incurred in getting the plants off, and am also greatly obliged for your trouble.

The Calif. Acad. has promised me its Ceanothus covers, and they must be on the way now. After going over the ground again with them, I shall be glad to put in the spring on Epilobium, which, however, I can scarcely hope to leave better than I find it. Will you kindly send the genus on at your convenience? I have not Hausmann's revision. Will you kindly give me data to order it from?

Very truly,

Wm. Trelease.

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., 4/18, 1888.

Dear Mr. Watson!

The box of *Epilobium* came, apparently safely, a few days ago. But I don't know about tackling them, for I am not out of the *Canadensis* thicket yet. *E. rigidus* & *crassifolius* show that. I did not understand them at all last summer, - as I suspected them. I believe that the enclosed is the nearest approach to a natural grouping I have yet made, though I do not feel that I have hit on expressions for the real characters of the groups I make. I wish you could run over the specimens for me to test this, before I drop the genus for the summer.

Yes, I go to Berlin for the summer, as a sort of necessary and very distasteful pilgrimage in the interest of my department. I despise travel and do not want bacteria, but it has seemed best for me to spend this vacation so. I sail from New York

St. Louis, Mo., _____ 188

on the "Woodland", June 6, for Tutuwp.
Now I am sure not to get done with
Eriobium before that date, and I had
meant to write you again before
they came. But may I leave them
in Samuel's care as the Garden library
during my absence? Expressage is
rather expensive, & I would not ask
this favor.

I do not understand you having
no copy of the Engelmann book. Mr. Shaw told
me he had sent a copy to the herbarium, so that
I did not send one to you personally. Now my
credit is exhausted. But if the Garden copy has
not yet reached you let me know and I will
urge Mr. Shaw to attend to it.

Magnolias & Tulips are in their prime here,
and we count that Spring has come.

Please remember me very kindly to Mr. May,

Very truly,
Wm. Trelease

I am afraid I can't help you on
Lathyrus raietii & poaeformis, I have no letter
from Hastings, etc. which is the nearest approach.
Unfortunately Engelmann is in Europe & his house
locked up, so I can't get at the Engelm. herb.
to look for them. Tracy gives neither, & he
imagined through everything he could find,
in consulting his list of Mo. plants. Neither
is noted in Engelmann's Mex. lists of Mo. plants.
That I have.

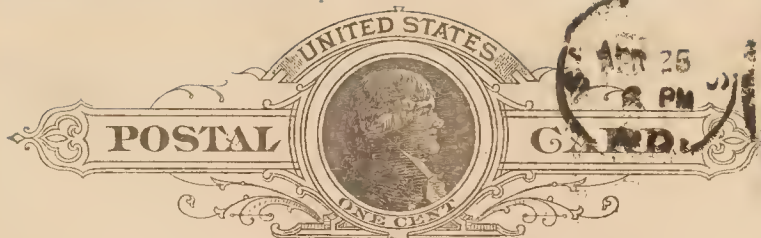
St. Louis, 4/25/88.

Dear Mr. Watson:

Won't you let me have Cerastes,
and Ceanothus Palmeri, Veatchianus, + Pore-
diatus again? I don't see how the leaves can
be opposite or alternate in a single species there, &
must try to get those things straight. But I am
obliged to fall back on your material for it. C.
rigidus of Bor. Mex. Bound. is evidently the same as
C. verrucosus, however it may be a bit more
distinctive, if I could burn them all up, it
could make a nice lot of good species out
of my ideas!

Yours,

Sent May 4/88
Wm. C. Cullen.



NOTHING BUT THE ADDRESS TO BE ON THIS SIDE.

Mr. Berens Watson
Ber. Garden,
Cambridge -
Mass.

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., 5/28. 1888.

Dear Mr. Watson:

I have expressed, prepaid, the Ceanothus covers, and am very glad to have had them again. To my mind, Torrey was quite right in referring the thin-leaved var. grandifolius to C. rigidus, rather than to crassifolius. The genus has been my head to me, and I do not now sordidatus nordivari-
catus now, but I hope to get them out in my mind after a while. To get more light on them, I have sent a synoptical list of the species, arranged essentially as I proposed to you, but with one or two of the modifications you suggest, to the Cal. Acad., who have given me the run of their species. Old species & synonymy are left for your milings, but I have appended a few notes and described 3 species that I hope will stand.

The Rose covers will probably be here today, I have your letter. I leave here on Saturday, & sail June 6. Can I do anything for you abroad?
Yours, Wm. Trelease.

The Shaw School of Botany,

William Trelease,

Professor in Charge.

St. Louis, Mo., Nov. 14, 1888.

Dear Mr. Watson:

Thanks for your note, just received. I shall
hardly get through with my bacteria rush before
Christmas, then I shall make time for Epilobium,
of which I already have some material, - as yet ungrouped.
But I don't even hope to do much with the ferns
unless the hybrid racket can be worked pretty hard.
I was talking with Baker about it, at Kew, and he
feels no end of hybrid possibilities in the ferns.

I suppose I shall cater it on Canorthus,
from both Greene and Parry. Mrs. Curran wrote
me somewhat after the candle fashion while I was
away, because I had let Greene know I was working
on their material. It seems he went round & asked
to see my Mss., so that he could indicate his sp.
and so prevent my increasing synonymy needless.
The only additional light I got at Kew, Brit. Mus. & Berlin
was that xxx should be as in slip, so as to include Veitchianus,
which of course should have gone before + + + on p. 112, in
my old arrangement. C. Parryi, & its + + + characters should
go before no 7. Congdon collected it in 1880, wild, & it was collected

by Cobb in 1857. A spec. of Bigelow's Mex. Bonin,
Call. seems to be the same thing, too. - both at Kew.
The inflorescence - ~~stems~~ of sanguineous very rarely
have one or two leaves!

I am still sailing at sea about
Janigolius and perediatrics but the other
things fix in pretty well, so far as herb.
material goes. - unless I have become even
the things so long as to have become blind
to their real characters, which is possible.
At any rate, if Harry fixes the list a fair
trial it will have done all it was fitted
for, and we must rely on him to supply the
defective field-notes for the Flera.

Please remember me very kindly to Mrs.
Hay and to Dr. Goodale. I am so crowded with
work that I am writing to nobody.

Very truly,
Thos. Mearns.

St. Louis, 1/7/89.

Dear Mr. Watson:

I have just taken the Epilobium
Jachages from the safe, and on opening
them find them sound. I shall make
them the subject of my dreams for the
rest of the college year, if not longer; but
since I appear to have bungled so very badly
over Ceanothus, for Barry will separate, for instance
my C. dentatus into species widely removed in his sym-
opsis, - I can't say I enjoy the prospect! When will more
of the Flora be published? Shall I expose my ignorance further
by a preliminary publication of my U.S. on Ulmaceae, Cela-
straceae, & the other Rhamnaceae? I want your advice.
Yours, Thos. Prentiss.

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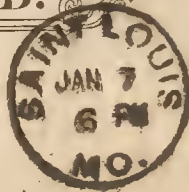
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 \end{array}$$

Mr. Severo Watson,
Box Garden,
Cambridge.

Mass.



NOTHING BUT THE ADDRESS TO BE ON THIS SIDE.



St. Louis, Jan. 14/89.

Dear Mr. Watson:

In the orders I have in Mss., I only think of the following points applicable to the Manual. — aside, perhaps, from a few points of distribution that have undoubtedly been noted: —

Seeds of Rhamnus alnifolia intermediate between those of Eurhamnus & Frangula, i.e. scarcely grooved & with nearly plane but thin cotyledons.

Canethus ovatus blooms at least a month earlier than Americanus, in the same locality.

Halictium polygamum occurs in Newfoundland! & Tenn.! and is blooms about a month later than furfurascens where the two occur together.

I don't know enough of Vitis to answer your question about fruit of riparia, and I don't think herb. material will add to what Engelman has said of it. But I have written Eggert, — a field-botanist.

I thank you for an encouraging letter. Of course I have opinions on the things I have really studied, and in the absence of definite contradiction I believe in them. But when an earthquake is springing under one of them and the fragments scattered all over the unit.

verse, as in Cavertus, I can't
help feeling that there is little
use in working, or that opinions
are more subjective than objective,
which amounts to the same thing,
if the differences are as great as
in this genus. Fall specimens
of C. cordulatus show that Greene &
Parr are right in saying - or least for
this set of species - that flower-
buds are formed in the fall: -
a pretty bad thing for a "Biologist"
to have failed to see. In fact,
Greene's criticism if it were tempered
with less flattery and if it did
not use me as a snare to
train you and Mrs. Curran with,
strikes me as a very decently
done thing - if it is not quite
all that Busby claims for it
in the Dryopteris Bulletin.

I have done as you advise,
with my Mrs. Of course I went
through the English & German
herbaria with it, so that the orders
are pretty fresh in my mind now.

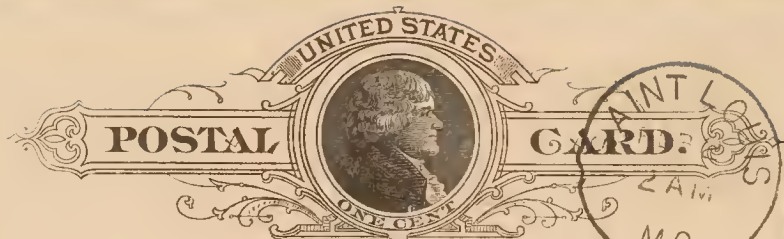
Please remember me very
kindly to Mrs. Gray - a wish in which
my wife joins me.

Yours truly, Wm. Oakes

Dear Mr. Watson:

Can you tell me what My-
ginda angustifolia, Nutt. is, & where
published? See Just's Jahresbericht for 1876,
i. 395, line 11. Have you any more light on
the position of Glossopetalon than Gray in Proc. xi.
73? I confess the 20-stamened plant from
Nevada (Gray) - which did not strike me as a
monstrosity - inclined me to look for the refer-
ence to Rosaceae; but I don't count my eye
as worth much for affinities. Shall I call
that plant G. Grayi?

2/1/89. Yours, Wm. D. Blake.



NOTHING BUT THE ADDRESS TO BE ON THIS SIDE.



Mr. Serrano Watson,
Cambridge.
Mass.

St. Louis. Mo. 4/16/89.

Dear Mr. Watson:

Adlum Torreyi ("A. sparsiflorum, Nutt.") was collected in S. W. Mo. (Newton Co.) by Broadhead in June 1857, and at first labeled by Engelman A. stenopetalum. The same thing (originally named stenopetalum, but afterward corrected to sparsiflorum) is here from "H. Gibson & Ill. saline," 1835. This is probably the way in which the reference you mention was made.

We have nothing but A. pulchellum and A. Torreyi, from the region you ask about.

I am afraid you are disappointed with me so far as Epilobium goes. But I haven't the manual things ready yet. I hope another week may do it. Some of Haussknicht's characters are badly contradicted by the plants.

Thank you for the dates sent. I do not know whether or not you will approve of my plan. In my ms., I have followed the usi-

the custom of reference to the first placing in the right genus. But in several instances (e.g. in Berchemia) the specific name adopted is not the oldest specific name, and after the description I have indicated what the use of the parenthesis would cause the plant to be called. Some people are going to use these names anyway, and it seems to me best that an attempted revision of a group should furnish no reliable data as the writer can give.

I am unusually busy this spring. When vacation comes, I hope to work at Epilobium every day, — but I do not feel hopeful of the outcome.

Yours,

(Thos. Peckham)

St. Louis. 4/26/89.

Dear Mr. Watson:

This is what I make of "Manual" *Epilobium*. I have been over the specimens a good many times with it, and think it will hold. I have said nothing about runners etc. because they are so rarely to be seen in herbarium specimens. - Perhaps the descriptions are already too long, though I have tried to keep them down.

So far as names go, I have thought best to follow *Hauschnecht* for the Manual. When I get through with the genus I may have other notions.

I must rely on your judgment as to the insertion of nos. 6, 7, & 8. I do not find either of them in the eastern specimens I have seen, yet I find *Hauschnecht* pretty careful now that I am getting into the genus, so that it has seemed to me best to give descriptions (from other Amer. specimens) so that they can be picked out if they really occur in our region. But I feel differently about *E. Americanum*, *Hausch.* which he says occurs as *E. tenellum*, *Ray*,

in Mrs. Paris, from the Catskills (Ray
insigne). It hardly seems worth
while to put in the name of a
questionable N. W. species for such
chance as these seedlings give.

I have left the underscoring
of names in pencil, for I do not
know your system; and the ac-
centing, because I do not know
whether you use both grave & acute
or only one. You will probably
mention the frequent purple
coloration of stem, leaf, & calyx
in the future description.

Please let me know your
opinion of the MSS.

I am going to take the
Rocky Mts. region now, in the same
way, then the West Coast. In
this way I begin to hope that
I may fish the things out of
what was entire confusion
to me until I got these ⁱⁿ Manual
species by themselves.

~~Yours,~~
Thos. Guleak.

Chamaenerion.

in a long raceme;

deeply parted;

Hal
§ 1. Flowers large, purple; calyx cleft almost to the ovary; petals widely spreading, usually entire; style and stamens successively deflexed; stigma 4-parted; ~~capsule long, many-seeded; seeds fusiform, with dingy coma. - Chamaenerion.~~

1. *E. angustifolium*, L. (Fire-weed, Great Willow-herb.) Several feet high, from a stout caudex, canescent; leaves ample, alternate, lanceolate, nearly entire, short-petioled, ~~pinnately veined the transverse veins connected by submarginal veinlets; flowers spreading, in a long raceme;~~ style hairy at base; seeds smooth. - Newly cleared hillsides, etc., mountains of North Carolina to Nebraska and far northward and westward. (Eu. & Asia.)

Lysimachion.

Hal
§ 2. Flowers small except ^{n. 2,} in the first, corymbed or paniced; calyx with an evident short tube or cup at base; petals less spreading, mostly deeply notched; stamens and style erect. ~~Lysimachion.~~

*Stigma 4-parted: seeds papillate: stem terete.

2. *E. hirsutum*, L. Several feet high, stout, somewhat branched, densely covered with soft white hairs; leaves chiefly opposite, large, spreading, lance-oblong, serrulate, sessile or clasping; petals rose-purple, hairy at base within; ~~capsules linear, many-seeded.~~ - Waste ground, New Bedford (Greene) and Roxbury, Mass. (Murray); near Albany (Peck) and Ithaca, New York (George); and Clifton, Ont. (Day.) (Doubtfully nat. from Eu.)

Annual, 1-3^d

?
3. *E. paniculatum*, Nutt. ~~4 feet or less~~ high, the firm slender stems with papery exfoliating bark ~~at base~~, repeatedly forked above; leaves mostly alternate and fascicled in the axils, narrowly lanceolate, sparingly denticulate, petioled; flowers rather few in the axils of the upper scattered and reduced leaves; calyx-tube very narrow; petals purple; capsules short, ascending, somewhat clavate, often falcate; ~~seeds readily falling.~~ - A western plant reaching into Nebraska and collected on the Canadian shore of Lake Huron (Macoun), hence to be looked for elsewhere along the lakes.

{ **Stigma clavate, undivided: capsules long and many-seeded.

{ Stem somewhat quadrangular or with 2-4 ridges or hairy lines decurrent from some of the leaves.

{ Tall and rather firm-stemmed, mostly branching: leaves ample, toothed, not revolute: flowers numerous: seeds papillate.

4. *F. coloratum*, Muhl. A foot or two high, with incurved and some glandular hairs above; leaves lanceolate, sharply serrulate or denticulate, ^{acute} ~~arched~~ ^{nodding}; tapering to conspicuous petioles; flowers small and pale, more or less ~~nodding~~; capsules incurved-pubescent, on peduncles shorter than the leaves; seeds dark, fusiform, not appendaged; coma cinnamon-colored. - Common, in wet places.

5. *F. adenocaulon*, Haussknecht. Habit of the last: distinguished by its more glandular pubescence above; less toothed often blunter leaves, abruptly contracted to shorter petioles; erect flowers; paler seeds with a nearly colorless prolongation at top; and merely dingy coma. - Wet places, through the northern states.

6. *F. glandulosum*, Lehm., a plant of the Rocky Mountains, etc., said by Haussknecht to occur from Canada to the mountains of North Carolina, differs from the preceding in being subsimple, incurved-pubescent above, but not glandular; with ovate-lanceolate leaves, mostly abruptly rounded to a sessile base and more coarsely glandular-toothed; and larger seeds. (*Asia*.)

*** Mostly low, ascending, slender, and simple (except in forms of *F. palustre*); leaves chiefly opposite, less toothed; flowers few in the upper axils, nodding; seeds with a more or less developed pale prominence at apex.

= Seeds areolate but not papillate; leaves not revolute.

7. *F. anagallidifolium*, Lar. Somewhat tufted, usually about a span high, glabrate; leaves erect or ascending, about as long as the internodes, elliptical-oblong to narrowly obovate, the lower very blunt, entire or the upper denticulate, tapering to short petioles; flowers purple; sepals rather obtuse; capsules glabrous, their peduncles exceeding the leaves; seeds short-appendaged. - A plant of the Rocky Mountains, said by Haussknecht to occur in the White Mountains of New Hampshire, the Adirondacks of New York, etc. (Fu.)

8. *F. lactiflorum*, Haussknecht. A span to a foot high, glabrous except for the pubescent lines, with elongated internodes; leaves somewhat spreading, elliptical, slightly repand-denticulate, obtuse, tapering into mostly elongated petioles; flowers rather smaller, white; sepals more acute; seeds with a more prominent appendage. - White Mountains and northward, according to Haussknecht. (Fu.)

= Seeds papillately roughened.

Or the lowest round-obovate

9. E. Hornemanni, Reichb. A span or two high, ^{often} glabrate; leaves mostly horizontal, ovate, the upper acutish, remotely somewhat low-denticulate, not revolute, abruptly contracted to winged petioles; seeds only slightly roughened, short, and with short appendage. (E. alpinum of 5th. ed.) - White Mountains of N. H., Dells of the Wisconsin River Lapham, and northward. (Eu.)

10. E. palustre, L., forma Labradoricum, Haussknecht. A span or less high, the slender stem incurved-pubescent; leaves mostly ascending and longer than the internodes, linear to elliptical-oblong, obtuse or round-truncate, narrowed below but not petioled, nearly entire and with revolute margins, their lateral veins inconspicuous; capsules incurved-pubescent to nearly glabrous, mostly equalled or exceeded by their slender peduncles; seeds fusiform, with elongated pale beak; coma dingy. - White Mountains and northward.

Forma monticolum, Haussknecht. About a foot high, more woody, often branched, with abundant incurved pubescence; leaves firm, revolute, erect, about as long as the internodes, linear-lanceolate, obtuse, sessile; flowers few; fruiting peduncles mostly about as long as the leaves; coma nearly white. (E. palustre, var. lineare, in part, of the 5th. ed.) - Swamps, Pennsylvania to Minnesota, northward and westward, where it occurs with the more typical form of the species. (Eu.)

+ + Stem firm, terete, without decurrent lines (or sometimes with mere traces of them in the first); leaves numerous, subentire, with revolute margins; seeds papillate, slightly appendaged; coma dingy.

11. E. lineare, Muhl. A foot or two high, usually much branched toward the top, cinereous with incurved hairs, at least above; leaves erect or ascending, linear-lanceolate, subacute, with inconspicuous lateral veins, tapering to short but distinct petioles; flowers numerous, pale, erect or arched; fruiting peduncles equalling or exceeding the leaves; capsules incurved-pubescent; seeds pale, linear-fusiform. (E. palustre, var. lineare, for the most part, of 5th. ed.) - Bogs, etc., Canada to Pennsylvania and westward.

12. E. strictum, Muhl. Habit of the last; densely beset with soft spreading somewhat glandular white hairs; leaves broader, more obtuse and with evident veins, very short-petioled or sessile; pubescence of capsules soft and spreading. (E. molle, Torr. and of 5th. ed.) - Bogs, Massachusetts to Minnesota, south to Virginia and Illinois.

St. Louis, 5/21/89.

Dear Mr. Watson:

Thank you for the memorandum concerning the Gay and Joas specimens, which will be stamped accordingly.

The specimens and Bailey's book came safely, and I enclose postage. I had looked for something from Bailey, but failed to see the book noticed. I see it is dated 1883.

This genus is discouraging. Occasionally I vaguely dream that I see something in it, but even the Rocky Mt. species are as yet beyond me. I mean to do what I can, but — ?

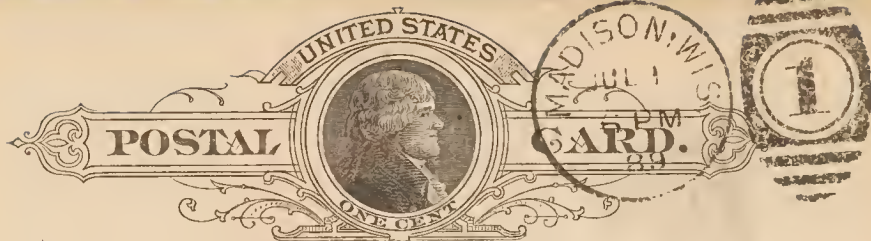
In haste,

Wm. H. Cress.

Madison. Mo. 7/1. 89.

Dear Mr. Watson:

The fragmentary Stex that
Mr. Oyster sends me is I. decedua.
which I have not before seen from
Kas. though it ought to range through
Kas. + Ind. Territory. I have been
asking him to send it. I find Epilo-
bius glandulosus here.
a 2nd. Mr. Deane.



NOTHING BUT THE ADDRESS TO BE ON THIS SIDE.

Mr. James Watson,

Brooklyn,

Cambridge.

Mass.

THE SHAW SCHOOL OF BOTANY.

WILLIAM TRELEASE,

PROFESSOR IN CHARGE.

ST. LOUIS, MO.,

12/17, 1889.

Dear Mr. Watson:

Will you kindly return
the enclosed letter at your con-
venience, with an expression
of candid opinion on Dr. W's prom-
ise as a systematic worker?
I know him as a correspond-
ent, but have never met him.
And have not seen enough
of his work (in lines that I
know nothing of) to estimate
its thoroughness and value.
I do not even know his age.

Please remember me
very kindly to Mrs. Gray. My wife
and I often speak of her,
and wish that we might
see her.

With Christmas greetings.

W.T.

St. Louis, Mo., Jan 21, 1890.

Dear Mr. Watson:

Thank you very much for the hint concerning the Ball Herbarium. While it is not in the line that I have planned for final development (N. & A. botany), I fully appreciate its value, and if it can be obtained I shall certainly be glad to get it, and can at once put it temporarily in the fireproof building that we have the Benhardt and Engelman herbaria in. It will be but a short time, I feel certain, before we have a large and really fine fireproof building for our collections and the library we must soon form.

Acting on your suggestion I have written Sir Joseph Hooker, making formal application for the Ball Herbarium. I had seen the "Nature" note before, but it had not occurred to me that it would be anything but impertinence for anyone to ask for it. However, I judge from your letter that you have fully direct knowledge that applications will not be viewed in that light. If you happen to have

had any inquiries made by New about
St. Louis, I shall appreciate any good
word you may say for us. The "Gazette"
outline policy of the Trustees (Nov. '89) is au-
thentic, so I think it can be safely said
that the Trustees are planning to do the
best they can to realize the future that
good management can scarcely fail
to secure; so far, I have not made a
suggestion that has not been promptly and
cordially acted on; and while what I am
planning is slow and unobtrusive develop-
ment, I cannot foresee that anything
but real development can occur under
the present Board.

With kindest regards to Mrs. Gray and
my other Cambridge friends,

Yours,

(Mrs. O'Leary,

THE MISSOURI BOTANICAL GARDEN,

WILLIAM TRELEASE, DIRECTOR.

ASSISTANTS:

BOTANY, - A. S. HITCHCOCK.

HORTICULTURE, - J. C. DUFFEY.

JAMES GURNEY, HEAD GARDENER.

ST. LOUIS, MO., Jan 27, 1890.

Dear Mr. Watson:

We have none of the following: - Grisebach, Pl. Connz.; Walther-Arnott, Pagineus; nor Murray. Commentationes. I should be very glad indeed to get them, and of course if a second copy of Kirk's book can be obtained all the better. I have already written Maly in regard to Gard. Chron. Circular, which I was very glad to see.

We are still torn up, but shall get settled after a time. I am putting a steam plant in the house, which will also heat the museum building, making it safer & cheaper.

I will see what can be done about obtaining the needed Academy nos. One or two have been issued since you had your last number.

With regards to friends

- comp.

Wm. B. G.

ST. LOUIS, MO., Nov. 12, 1890.

Dear Mr. Watson:

I write to acknowledge the receipt of *Epilobium*, and at the same time to say that I have no suggestions for the Manual further than a list of corrected ranges which I sent to Coulter with my review of the book for the Gazette.

Things here are going along as usual. I am kept pretty busy, but find time for a little *Epilobium* work every week. My plates, so far as I care to carry them, are about drawn. The house comes on slowly, but I hope we may get into it soon after the holidays.

Kindest regards to Mrs. Eager,

Wm. Trelease.

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, ASST. IN BOTANY.

J. C. DUFFEY, ASST. IN ENTOMOLOGY.

JAMES GURNEY, HEAD GARDENER.

J. W. DUNFORD, ASST. GARDENER.

St. Louis, Mar. 26, 1891.

Dear Mr. Watson:

I have expressed your *Epilobium* specimens today, and hope that the box may reach you safely. I cannot sufficiently thank you for your patience with me in the long detention of the specimens, but the work has been the slowest and hardest I have yet done. While my paper - to be distributed within a week or two - is not by any means the last word on the genus, I think it will make it somewhat easier for other people to overhaul their material.

I did not put Haussknicht and Barbey in the box, for I want to ask if I may not order a new copy sent direct to you for you to bind as you wish at my expense. I must say, however, that your copy has a few marginal annotations. The reason for my proposition is to be found in the fact that

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, ASST. IN BOTANY.

JAMES GURNEY, HEAD GARDENER.

J. C. DUFFEY, ASST. IN ENTOMOLOGY.

J. W. DUNFORD, ASST. GARDENER.

St. Louis,

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three years of thumbing has produced results not calculated to impress you favorably as to the cleanliness of my fingers, and I am really ashamed to send back so soiled a book. Dirt in St. Louis is insidious and omnipresent! On hearing from you, I shall either return these copies or order new, as you may direct.

Will you not kindly let me know whether you have any Texas specimens of Erodium macrophyllum. The species is very well marked by the characters in my paper, but Coulter thinks that the species is only Californian. I find here not a single specimen of the plant, and if your herbarium does not show the range Texas, it must be that I let my pen slip - but I think I saw it from Texas.

I may not have time to work rapidly, but I want to start another

MISSOURI BOTANICAL GARDEN,

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J. W. DUNFORD, ASST. GARDENER.

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ferns, and have thought of Desmo-
dium and Rumex as genera
 that trouble most people a good deal,
 and may receive some help from a
 careful study with respect to all at-
 tainable characters. You are inter-
 ested in both: perhaps you have
 both so nearly in shape that you
 would not want them disturbed. In
 case
 either is in such condition that you
 would care to have it overhauled, I
 should really like to try it, and at any
 rate should like your advice. If
 you are willing for me to try either,
 may I not have your material?

Thanks for your determination
 of the Polygonum ariculare — what I
 had called it, but it is a little paler
 & closer jointed than my other specimens.

Very truly

Wm. Trelease

Essentially as sent to Trelease & Prof.
Lamsey. -

HERBARIUM OF HARVARD UNIVERSITY,
BOTANIC GARDEN, CAMBRIDGE, MASS.

May 11th 1891

Dear Prof. Trelease,

Your revision of
Epilobium came a few days
ago and I had intended to acknowl-
edge its receipt more promptly.
Accept my thanks. It appears
to be very thoroughly done, &
the plates are a great assis-
tance. I congratulate you
upon the results of your long
labor.

I think I told you that a
part of the Ball Herbarium
had been received here, and
the ~~method~~ ^{method} of its disposal will

need to be settled before
long. The only formal applicants
for it from this country, so far
as I know, were yourself &
the Smithsonian Institution. When
the trustees under the will (Hooker
& Dyer) came to examine the Herbar-
ium they found that it was a
far more considerable affair than
they had had any idea of. They had
it removed to Kew, and set to work
to go over it and take what they
wanted, and to have the same done
for the Edinburgh Botanic Garden.
Then to simplify (for them) the question
of how to dispose of the remainder
they proposed to send it all to me
"leaving it at my discretion to sub-
sify the claims of St. Louis, Wash-
ington, &c." This was not at all

came six cases, with the statement that this was about one third of the whole, and that it would be some time before the rest could be sent as they had been obliged to stop work upon it. That is the way the matter stands at present, as I have done nothing beyond overhauling a few of the bundles first sent. Now what shall be done?

~~Several~~ ^{Several} ~~plans are the~~ plans that occur as more or less feasible. Yourself to me, either of which may be set.

~~is satisfactory~~. & Prof. Wilson may in turn as you may agree send some one here to select out a set - or your representatives may together go over the collections making a fair distribution of the whole - or you may

to my taste, but I could not
will refuse to take the responsi-
bility. I intend however to make
that responsibility as light as
possible, and to leave it for the
Herbarium concerned to decide
upon some mutually satisfactory
way of making an equitable divi-
sion, ^{+ distribution of the large material.} For there is doubtless much
more than any one or two
institutions will want, as there
is for the most part an extensive
suite of specimens under each
species.

In December last they sent me
two cases containing the general
stock of duplicates, including
some bundles that Mr. Bell had
especially designed for this Her-
barium. Then in March there

agree upon some one who shall make¹⁸⁹
the distribution into such number of
sets as he may find advisable, the
first two sets going to Washington & St.
Louis, and the rest to other institu-
tions as you may decide, each
paying pro rata towards the expense
of the distribution. This last arrange-
ment seems to me to be on the whole
the best - but some better one may
be devised.

I would like the privilege of sharing to
some extent in the division. This
herbarium is very fairly supplied
with European & Mediterranean plants,
but we would doubtless find some
 desiderata in these collections,
as Dr. Kew. If this is allowed it will

probably be best that all the work should be done here.

There is no special need of haste in making a decision, but it will be well to come to an understanding, and as the work of division will take considerable time the sooner it is begun the better. I shall be glad to hear from you at your convenience.

Yours truly
Anna Watson

THE SHAW SCHOOL OF BOTANY.

WILLIAM TRELEASE,

PROFESSOR IN CHARGE.

ST. LOUIS, MO., May 24, 1891.

Dear Mr. Nelson:

Now that "the dinner" is over I want to write you, and especially as your last letter lies on my desk this morning. First, I want to thank you for the large package of specimens sent on the first. I have not yet opened them, for we are just finishing mounting Bernhardi's Herbarium, and a well made bundle is better than an additional number of loose sheets until that is ended; but we shall mount your plants next week. While the final arrangements of the collections will take some time yet, we are now out of the woods on the Engelmann and Bernhardi Herbaria—some 15000 sheets. Next, I want to say that I have found it hard to make up my mind to return your copy of Haussknacht and Barby, so badly soiled, while on the other hand I do not feel quite at liberty to use the discretionary power you give me as to replacing them. The

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Best thing I can do is to send our
copies along with yours and ask you to make
the selection. If your copy was not anno-
tated, the case would be a clear one, though
doubt very much having to show the effect
of dirty fingers. Should you decide to keep
the fresh copy, please bind to suit your-
self & have it charged to Mr. Bot. Garden,
sending bill to me. The two copies to be
returned can be expressed at my cost.

Thank you for your kind words on
my paper. I think I have clearly shown
where I do not feel certain about species,
so that the parts of the genus still to be
cleared up are pretty well indicated, while
the rest are fairly satisfactory to me. At
any rate the genus is in better shape for some
other fellow to work on it. The worst thing
about it is that I should never have heard of
a species described before I began my work,
until I was in finis! I was not pleased
with the execution of the plates, but it is the

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first work of the kind done here, and the lithographers will do better next time. I should have preferred a uniform natural size for the full length figures, but thought it was better to figure the little ones full size than to follow the otherwise uniform half size.

I wish you could have been here for our dinner. We had half a dozen botanists here, and a very good time. It does me good to have these little gatherings, though I hate the excitement of a big dinner.

Now as to the Ball herbarium. I made application for it on your suggestion. We should be glad of much or little of it, for we should make a mistake in policy if we did not fire our herbarium broad scope. But I do not at all feel that we have any claim to any part of it. and in your distribution you ought to decide where the things shall go. I don't run you the talk. If I had it to do, I should

THE SHAW SCHOOL OF BOTANY.

WILLIAM TRELEASE,

PROFESSOR IN CHARGE.

*A single duplicate would always go to no. 2, a third specimen always to no. 3, &c.

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put some competent fellow on it and have him divide it into the most desirable number of sets, two or three of which would contain an approximately equal number of specimens. If there were only one specimen of a species, I should invariably put that in Set no. 1,* and if there were only one label to several duplicates, I should put the original label always in set 1. Then you could decide where the first set ought to go, on the merits of the question, and the sequence of distribution of the remainder, growing successively smaller, would offer little difficulty. If I were not interested in the matter, and asked for an opinion, I should say that it would be best for set no. 1 (after you have secured Harvard desiderata) to go to St. Louis, for the reason that your set is accessible to Eastern botanists, while those from the west would have to go to the seaboard for the second best set if that went to Washington, - but

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this is only my personal opinion, you may think differently, and, as I have said, I should not think of claiming anything, and if Professor Huxley feels differently that settles the matter. We shall be glad of whatever you think best to let us have! If I were distributing the plants, I should divide the expense of sorting, labeling, and packing, among the first half dozen sets, pro rata, and let the small sets go where they would do most good, without cost except for transportation; but that again is entirely in your hands, and above criticism. I ought to have said before that of course you ought to take what you need for Cambridge.

Just now I am very much engaged with garden matters, — making a "wild garden", putting up a fireproof herbarium building, &c., so that my work is very scrappy; but I want to do a small piece of work before winter, and think it had best be on Rumex. We have a lot

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of desks growing, and fair herbarium material, but I should not think of publishing without very carefully using your specimens. You know that I work slowly. I could not go to Cambridge for the whole work. At best I could run on when I felt I was at end of the work, and consume your material, unless you could let me have it here. The desirability and practicability of sending collections away, raised in your letter of April 1, I have thought of many times. Vasey was thoroughly disgusted that I kept their *Epilobium*s a little over a year. Your extreme patience and good nature prevented you from saying so much, though when you saw an *Epilobium* die no doubt you had pious thoughts of me. On the other hand, naming the things from our large herbaria as they were could only have perpetuated error and added to confusion, for many

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years, and whatever my study may be worth, it ought to form a basis for better use of the collections and better work on the remaining doubtful things. Now that we have our plants fastened down so that labels can't be lost or misplaced, I feel disposed to send groups anywhere for study if I feel that they will be carefully studied and reasonably safe from fire. I think the advantage of having them used by people who will make good use of them but cannot come here, more than compensates for the inconvenience of a reasonable detention and the not very great danger of loss in transportation. If you were to feel as I do, I should be glad of the use of your Rumex sheets till winter. If the balance is the other way in your mind, I could not blame you for refusing to let them leave your own building.

For next winter, I have a haul but

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interesting & if well done uncommonly useful piece of work. For the last seven years, I have been studying trees in their winter condition, working toward a manual. At first I planned to include the woody plants of your Manual region. I am now taking only the trees of the Eastern third of the Continent — the Manual & Chapman regions. I have a large twig herbarium, am well along in the preliminary work, and if well and not too much burdened with DeCantire's work am quite confident of nearly completing the book next winter, and securing material on which it can be completed during the following summer. I plan to figure the twig characters of every species for which cuts can be made useful. I expect to make an abundance of mistakes as to color of bark and hair of growth, because both vary in dis-

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fewer localities: but by good keys and terse descriptions I hope to make a very useful book, and one on which, with the aid of criticisms brought out by its use, I can make a second edition in which shrubs of the same region can be included. I have said very little about this so far, because I was collecting material and perfecting my plan of work along. Now I am ready to go ahead and round it up as well as my ability and facilities will permit. I hope you will approve of the plan. If you do, I may need your aid with your publishers when I get the manuscript half done, for I think if it is to do all it is capable of, such a book should come from the same press as the Manual, and be worked by the publishers for use in teaching "winter botany".

Wm. Trelease.

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, ASST. IN BOTANY.

J. C. DUFFEY, ASST. IN ENTOMOLOGY.

JAMES GURNEY, HEAD GARDENER.

J. W. DUNFORD, ASST. GARDENER.

St. Louis, June 9, 1891.

Dear Mr. Watson:

Can you tell me where to look for any of Payson & Palmer's 1878 plants other than those incidentally mentioned in your "Contributions" & Bioc. Centr. Amer.? Thank you very much for your decision regarding Rumex. I am working over our specimens now, and shall be glad to have yours whenever you care to send them. You know the building we are now in is fireproof, as well as the new one!

Both books were safely received. I shall promptly attend to bill for binding Haussknecht when it comes.

Please remember me kindly to Mrs. Lutz and Dr. Goodale. I was pained by the sad news of his new affliction.

Very truly,
Wm. Trelease.

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, Asst. in Botany.

J. C. DUFFEY, Asst. in Horticulture.

JAMES GURNEY, Head Gardener.

J. W. DUNFORD, Ass't Gardener.

St. Louis, June 29, 1891.

Dear Mr. Watson:

Since writing you I have unearthed
a copy of Barry's *Mss. list of P. & P. Plants*.

Yes, I do want Thurber's frames
if they can be had at a figure
within my power. Please get me
a refusal of the lot and learn
the best figure at which they
can be bought.

Yours,

Wm. Trelease.

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, ASST. IN BOTANY.

JAMES GURNEY, HEAD GARDENER.

J. C. DUFFEY, ASST. IN ENTOMOLOGY.

J. W. DUNFORD, ASST. GARDENER.

St. Louis, July 25, 1897.

Dear Mr. Watson:

I am now pretty well along with my preliminary study of Rumex, and with my plates of the 7 or 8 species we have growing about us here - and which we are figuring from the living plants. So, now, if you still feel that you can do so, I shall be very glad to have you send me the Cambridge material, which I think I can promise you shall be safely cared for, while I need not assure you that I shall make as good use of it as lies in my power.

I suppose you will go to Washington? I very much doubt if I can take the time for it. If I get off at all I want to go to the mountains, but as I have already been out to Warton for a little while I may have to be content with that. My kindest regards to Miss Ag.

Yours,
Thos. Dallas.

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, Asst. in Botany.

J. C. DUFFEY, Asst. in Horticulture.

JAMES GURNEY, Head Gardener

J. W. DUNFORD, Ass't Gardener.

St. Louis, Aug. 12, 1891.

Dear Mr. Watson:

I shall be very glad of the opportunity to get the Thurber specimens if they are offered at the same you name, and if so, you may, if you please, ask to have them sent on to us with a bill against the Garden.

I thank you very much for sending on the Rumex. I must have been very rude in writing for the specimens a second time. It must have been because I understood you to offer to send them when I got ready for them, so wrote as I got to the point of needing them. I am getting well into them now, and hope to be practically done by the end of the month - when I hope to get to the mountains for a fortnight's shooting and collecting.

Yours,

Thos. D. S. C.

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, Asst. in Botany.

J. C. DUFFEY, Asst. in Horticulture.

JAMES GURNEY, Head Gardener

J. W. DUNFORD, Ass't Gardener.

St. Louis, 9/21, 1891.

Dear Mr. Watson:

I have your note of the 18th, relative to the Thurber prisms, & shall be obliged if you will forward the case and the lot of the supplies of which you write, by freight, letting me know of any expense to which you may be put. If you think ^{\$150.00} a fair price (as you wrote me), I think I had better offer Mr. Woolson that, for I want to do what is right. Probably there will be specimens to exceed that value - from what you write, - but they must be given away for the most part.

Please remember me kindly to Mr. E. and Dr. Goodale. I am just in from a month's outing in Colorado.

Cordially Yours,

Wm. Trelease.

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, Asst. in Botany.

J. C. DUFFEY, Asst. in Horticulture.

JAMES GURNEY, Head Gardener

J. W. DUNFORD, Ass't Gardener.

St. Louis, Mo. 14, 1891.

Dear Mr. Nelson:

The case and bundle, containing Thunbergian frasses, came to hand in good order yesterday. When you ascertain the cost of getting the packages to Boston, please let me know, and I will reimburse for the entire expense you have been put to.

Will you not kindly say to Mr. Noolson that unless he is desirous of an immediate settlement I should like to defer payment until we have laid our order for mounting (perhaps requiring 3 or 4 weeks), so that I can see what number of sheets we are likely to get, - but I shall be glad to do as he wishes in the matter.

Godday Yours,

Wm. Trelease.

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, Asst. in Botany.

JAMES GURNEY, Head Gardener

J. C. DUFFEY, Asst. in Horticulture.

J. W. DUNFORD, Ass't Gardener.

St. Louis, Nov. 20, 1891.

Dear Mr. Watson:

My Assistant, Mr. Hitchcock, who is soon to leave me to go to the Kas. Agl. College as Kellerman's successor, has a considerable pile of his West Indian plants that he must look up in the East, so I have advised him to spend the better part of December in Cambridge.

In case you can allow him the use of a table at the herbarium, during his stay there, you will oblige me and do him a good deal of good, for he is a bright earnest fellow, just finishing up a rather good piece of work. Should you be unable to let him use the herbarium, please wire me at once. Otherwise he will probably call on you about Dec. 1.

With kind regards to Mrs. Gay.

Wm. Trelease.
Trelease

MISSOURI BOTANICAL GARDEN,

WM. TRELEASE, DIRECTOR.

A. S. HITCHCOCK, Asst. in Botany.

J. C. DUFFEY, Asst. in Horticulture.

JAMES GURNEY, Head Gardener

J. W. DUNFORD, Ass't Gardener.

St. Louis, Nov, 23, 1891.

Dear Mr. Watson:

We have now gone over the
Okenia presses, and find a full
equivalent for the \$150.⁰⁰ I offered
in my letter of 9/21, so that the
Secretary of the Board will enclose
with this a check for that amt.
to Mr. Woolson's order. The large
quantity of duplicates go on to
Prof. Tracy of Miss., who will pay
Mr. Woolson what they are worth
for his herbarium. By this ar-
rangement the collection will bring
in more money than I could have af-
forded to pay for it, since I had
no use for the duplicates, though
I have drawn fully from the common
species represented, as well as the
rarer ones.

Wm. Trelease.

Dr Treub, Director
of the Botanic Garden
Buitenzorg (Java) has
to present his best thanks
to Mrs. Ada Gray for
the "list of the writings"
of her lamented and cele-
brated husband Dr. Ada
Gray, she had the great
and highly appreciated
kindness to send over
to Buitenzorg.

Dec. 25th 1880.

too much allowed to prevail
in criticism of the work of
others, and my poor friend
Seemann was not only
personally disliked by some
of our great men here
but his work in Botany
was not estimated at its
real value, but in harmony
with a preconceived estimate.

If you will consent to
write the notice of "H. Vit."
I hope you will make it a
really critical one of the ~~real~~
contents, but of course you are
left entirely to do what you
think best.

always yours faithfully
Henry Trimen

British Museum
6 March 1873.

Dear Dr. Gray,

Mr. Baker has sent me
a memorandum of yours relating
to two Potentillas described
in Pursh's Flora. I have
examined the types of these
in Herb. Banks with the
following results.

Potentilla spaca, Pursh. The whole
label to this runs "Labrador. Okkak
the northernmost settlement of
the Inuvians. Mr. La Trobe 1778"
It is exactly P. salisburgensis
Haenke & other European botanists
(= less hairy P. alpestris, Hall. fil.)
common in mountainous Europe.

as well as Finmark, Lapland
&c.

^{"Hudson's Bay"}
Potentilla dissecta, Pursh. - The
specimen in Herb. Banks is a
young one with the unexpanded
flowers in a close terminal
corymb. ~~It is not~~ in.

Carruthers agrees with me in
considering it probably P.
diversifolia for which it
seems only to differ in its
larger size, less amount of
hairiness (the under side of
leaves only slightly pilose) and
more deeply cut leaflets.

I want to ask you to do
the Journal of Botany a
good turn by writing for it
a notice of Dr. Seemann's
"Flora hibernica" now completed
after great delay with the
last part. There is no
one in England capable of
giving a just opinion of the
book on its merits, ~~who~~
~~perhaps~~ is also possesses
any special knowledge of
the subject. You may
perhaps know that unfor-
-tunately in England personal
feelings are just now rather

British Museum
10 April 1873.

Dear Prof. Gray,

It is with great satisfaction that I read your kind acquiescence in my request for a notice of Seemann's *H. vitreus*. I have paid a visit to the publishers who inform me that a copy of Part 10 has been forwarded to you, & you have no doubt received it before this. I shall therefore look for an early fulfilment of your

promise.

Mr. Carruthers tells me to say that the Museum will purchase at the price you name as large a series as you can send of Grisebriht's Mexican plants. You & Prof. Eaton's determinations you will of course send with them -

I am anxious to say a little about the late Dr. Torrey in the Journal. Can you send me any

facts about him as a botanist which you think it desirable to print? Little do I know beyond what is given in "Men of the Time".

I am glad the notes about the *Potentillas* were satisfactory, and hope you will never hesitate to avail yourself of any assistance which ^{here} my position may enable me to give you -

Yours faithfully
Henry Trimen

latter with fruit about half-size
as to the three forms of which
you send fragments, there
can be little doubt in
referring it to the last with
lax interrupted spikes &
long filiform pilose stigmas
("longi reflexi pubescentes" in
Mitchell's description, quite
true of his specimens)
Another old specimen from Kalm
is the same form.

I hope you are keeping in
good health. We are having a
most trying spring in England
& have suffered from a keen dry
North-East wind & no rain for more
than a month with a low temperature
little sun & plenty of dust. Of course all
vegetation very backward -
Yours faithfully Henry Trimen

17 May 1876

Dear Dr. Gray,

I received your note the
day before yesterday; I thought
I fear what this herbarium
tells about Acrida is not
much to your purpose, yet
I now send it such as it is.
We have no specimen from Clayton
of the plant; it is wanting in
the set & not marked off
in our copy of "Granovius"
"Flora Virginica".

On examination of the books
however, it seems to me that

Linnaeus rather founded his
A. cannabina on Mitchell's
Acnide than on Clayton's
plant.

Linnaeus published the genus in
"Amoenitates Acad." III p. 19 in
the paper on "Nova Genera" (under
the name of Chenon) the date
of which is 1751; the volume
bearing date 1756. Here you
will see he quotes "Mitchell."
first.

Mitchell's genus Acnide is
in his appendix (p 45) to the
"Dissertatio de principis Botani-
-corum & Zoologorum" the title -

page of which is dated 1769 but
the ~~proper~~ end of the body of the
work "ex editis meis virginiae
1738" & the appendix 1741.

It is clear that Linnaeus had
received a description of the
plant either written or
printed from Mitchell before
1751 the date of the paper
in the "Amoen. Acad."

Excuse this rigmarole; but
we have Mitchell's original
specimens here; & as I cannot
help you with Clayton's, it
may be useful to do for
them what you asked to do
for Clayton's.

We have both male & female
plants from Mitchell, the

Many thanks for the specimens
you sent; I will get Hieron's
opinion on the *Ranunculus*.

I have just come across a
very fine series of specimens
of *Pholisoma* in Nuttall's
herb., a scarce plant is it
not?

Faithfully yours
Henry Trimen

HARVARD COLLEGE.

UNIVERSITY LECTURES, 1872-73.

Admit *Miss Ella F. Tripp*

to ~~Mr.~~ *Prof. Gray's*

Lectures.

at Botanic Garden, Saturdays 4 P.M.

Rec'd ^{*}*3.50*

E. W. Hooper Steward.

by H. S. C.

HARVARD COLLEGE.

UNIVERSITY LECTURES, 1872-73

Admit *Miss E. F. Tripp*

to Mr. *Prof Grays*

~~Lectures.~~

Laboratory Instruction in Botany
for June

Rec'd

12.

E. W. Hesper Steward.

by H. D. C.

HARVARD COLLEGE.

UNIVERSITY LECTURES, 1872-73.

Admit *Miss F. Tripp*
to *Mr. Laboratory Instruction* Lectures.
in Botany - July

Rec'd 12.

E. W. Hooper Steward.
by H. D. C.

BOTANIC GARDEN, CAMBRIDGE, MASS.

My re -

Yes. Miss Olney.
These variations in
color - tho. not
common - are liable
to turn up.

You should print
them out to your
Govt Professor Bailey

Truly

Gray



Miss E. S. Trappe

129 Benefit St

Providence R.I.



My dear Miss Tupper

BOTANIC GARDEN, CAMBRIDGE, MASS.

July 29th 1874

It is rather difficult
for me to say about
those Houston Charts.
You know those of
mine. I believe --
but I never saw
those modified by
Gummus. - I don't
think they are modified
I have no idea.
I know of nothing else
of the sort.

Could you not
manage to see
them yourself - before
purchasing, and
so judge for
yourself

Don't hesitate
to write me when
you find occasion
Truly Yours

A Gray

Today.

If we maintain the infinite divisibility of matter I do not see how we can maintain that matter or energy increases or decreases per saltum.

The modern ideas of electricity & magnetism are all based upon ideas of continuity and action from particle to particle. in contradistinction to action at a distance. An idea of continuity in Electrodynamics can best be obtained by reading Maxwell's Electricity.

This is an understating however. ^{Thinking yourself}
+ Mrs Gray a happy New Year & Very Sincerely

John Frowbridge

John Frowbridge

Jan 1 1880

Dear Doctor Gray.

I do not know of any trustworthy scientific account of the doctrine of continuity as a whole. The school of Herbert Spencer have rapidly assimilated some of the main features of the doctrine but I do not think that the physical ideas of this school can be depended upon.

The best idea of the present state of the doctrine can be obtained by reading the paper of Andrews on the continuity of the liquid & gaseous states. very well summarized up by Tait in his Recent Advances in Physical Science page 330 et seq. The papers of J. Willard Gibbs also assume the doctrine. These papers are unintelligible to any but a student of thermodynamics proper.

"Continuity" and the authors add "a needlessly confusing & premature". The bearing of this amounts to this, that we cannot discuss any problem of fluid motion - and all physics is occupied with discussing of fluid motion today - without starting with the above premise of Continuity. The differential equation of Continuity in this sense, occupies an important place in mathematical physics as the equation of the Conservation of Energy - which metaphysicians do not ^{presently} comprehend by the way - Now in regard to the continuity of Energy - Perhaps the best statement of this doctrine is contained in a review of ~~Plato~~ by J. Clerk Maxwell of Plateau's work on Soap bubbles. This review is contained in Nature Thursday June 18/874 (Vol. 242. No. 10. page 119) The paragraph near top of page 120 is especially noteworthy & contains substantially the basis of the advanced physics of

There is a short account of Gibbs' ideas in the last edition (1875) of Maxwell's treatise on Heat page 195 & seq.

In Thomson & Tait's large treatise on Natural Philosophy there is a mathematical discussion of the equation

of Continuity in Hydrodynamics page 124 - edition 1867. The authors before beginning their analysis - thus state their premise.

"As there can be neither annihilation nor generation of matter in any material motion or action, the whole quantity of a fluid within any space at any time must be equal to the quantity originally in that space, increased by the whole quantity that has entered it and diminished by the whole quantity that has left it. This idea when expressed in a perfectly comprehensive manner for every portion of a fluid in motion constitutes what is called the equation of

The Germans seemed to find more
trouble with the Dutch than I did.
We were treated to raw herring, and
given - every where - oleomargarine
in place of butter - I can taste the Table-
d'Hôte's yet, Still they have not
been able to adulterate the Rembrandts
& the Teniers - and the Hobbema's
We left Holland at Arnhem with
an increase of our travelling party in
the shape of J. P. A. On the whole, however,
our Holland trip paid. We have seen
the finished Cathedral at Cologne -

The great Dentmal at Bingen
The view from the new Schloss Castle
Hotel at Heidelberg; and we have been
at Baden Baden - I visited Professor
Quincke's laboratory - if it can be ~~seen~~

dignified with such a title - at Heidelberg
The Privat Docent showed me the place
in the absence of the Professor - I wish I had
counted his "Bitte" & his "Danke sehr" -

We have met thus far no acquaintances -
Our thoughts fly back to Mrs Gray & yourself
very often - and also to the Pickering's & the Dixwells
We long to hear how Mrs Dix is - My wife likes to write to Mrs Gray very soon -
Alice sends her love to you both - Sincerely John R. Smith

Trurobridge
Interlaken - Switzerland
Sept. 6 1885

Dear Doctor Gray -
Rapid travelling can be my only excuse
for not answering ^{Mrs Gray's} your very kind note,
and acknowledging its valuable contents.
I hope to have the pleasure of presenting
the letters of introduction next Spring
when we return to England. We
landed at Liverpool July 6th & proceeded
immediately to Edgebaston Hall where
an English friend of ours resides. Then
he went to Oxford & London - Spending
altogether only three weeks in England -
All American feel, I suppose, that
they must have lived in England in an
existence antedating the present. It seemed
perfectly natural to be sitting on the tomb
of a crusader or inhaling the smoke
of London - I saw the Raphael which
the Nation has bought from the Duke of

Northbrook - Three Americans - who
will be in the States in the fall - Mrs Gray very soon -
Sincerely John R. Smith

Came over on the steamer with us -
of the rich commercial class - remained
sealed before it for the space of an hour -
& then almost simultaneously turned
to each other & remarked "I have
been trying to see three hundred thousand
dollars in it." He saw the Prince of
Wales riding in the Park - He rode across
London; He saw the Mikado and a
London alderman's home, and then crossed
to Boulogne. From there he went to
Holland by way of Brussels. At

Rotterdam he slept on a wharf with
the yards of a vessel almost penetrating
our chamber windows. Commerce seemed
to take a visible shape & to stalk up
& down everywhere - Many of the old
streets with the ever present canal in
the middle were very picturesque. From
Rotterdam he went to the Hague, arriving
on the Queen's birth day. The beautiful
park was illuminated with thousands
of lamps, flaming in bottles filled with oil.
& the crowds of people were very great. Europe

certainly will not find a want of men for
the shambles whenever Bismarck orders.
at Spheveningen
He saw the Sun set in the German
Ocean & the Germans drink beer in
the magnificent Kursaal at that
place. Both were large spectacles. He
enjoyed immensely the pictures at the
Hayne & at Amsterdam. He was
fortunate in arriving at the latter place
soon after the opening of the new
& splendid Museum - in which have
been gathered the great masterpieces
of Dutch art. The building itself is
superb. He saw something of the proverbial
cleanliness of the Dutch - but it struck
me that it was of the whitest Sepulchre
order. In out of the way towns in Holland
one is reduced to the language of the digits.
John Fiske I believe thinks that English
is rapidly becoming a universal language.
I wonder if he ever saw his luggage
going off to the Helder while he himself
was rapidly moving toward Utrecht.

M L Towbridge

My dear Dr Gray.

With you kindly
accept these few flowers
with our love and best
wishes for your birth day
may you have many
happy returns, is the

Sincere wish of your
attached neighbors

& friend

Mary L. Towbridge.

Nov 18. 1886

London July 25 1856
12. Paternoster Row.

Dr. Sir,

I am in rec^t of your favor of the 25th ult. as well as of the 2 copies of the Linnean Journal correspondence advised thereby. I am extremely obliged to you for your considerate courtesy, & shall not fail to communicate to the friend who wants the papers that it is to you he is indebted for them. Permit me to take this opportunity to ask whether I won't not get a list of the articles contained in the memoir of the American Academy. I am preparing a new edition of my Bibliographical Guide & should like in it to give a specification of the contents of the memoirs. When at Boston I addressed myself to the Librarian & he promised to make the list for me, but refused afterwards on account of its being too troublesome. As there is probably an assistant Librarian I won't very gladly pay him for his trouble.

Your Manual of the Botany of the Northern States is much wanted. Will the new Edition soon make its appearance I shall always be happy to be of service to

London 4 May 1860

60, Paternoster Row. E.C.

Professor Asa Gray
Dear Sir,

Professor Sophocles who has been staying a few days in London informs me that his Glossary of the later greek fills the entire new volume of the ^{Memoriae} ~~Bosch~~ Academy. He has been kind enough of the small number of separate impressions allowed to him by the Academy to let me have 26 copies. Considering however the very great importance of the work to scholars in Europe, many more copies will be required, and I address myself to you, trusting that you will put me in the way of obtaining as many more ^{copies} ~~vols~~ of the volume as I may require. I shall be very much obliged to you if by return mail you will inform me how many copies the Academy is willing to sell to me, and at what nett price. In ordering copies I shall at once send a cash oft for the amount.

Are you aware that your Structural Botany and first lessons have become text books at Cambridge? The demand for these two books as well as for the Manual, & "How Plants Grow", has been so

great during the last fortnight that I am
completely cleared out.

Believe me to be very dear Sir,

Yours most respectfully

Wm. B. E. Sta.
J. B. E. Sta.

London June 9 1860

60. Paternoster Row. E.C.

My dear Sir,

I am in receipt of your favor of the 21.st May & very much obliged for the 12 copies of Prof. Sophocles Glossary, which you have caused to be delivered to the Messrs. Sever & Francis for us. Your draft on me payable 30 days after sight will be duly honored. It is a misfortune that as once the type was standing an additional 500 copies were not struck off, for such a costly work can hardly be printed a second time. I would be quite willing to purchase from the Academy all the disposable copies even were the number 200 at the price now charged, but if you could obtain for me at least 50 copies I should be truly obliged. The only condition which I should be compelled to make if a large number could be sold to me would be that no other bookseller in America or Europe could get copies. However this condition would only obtain if there were more than 50 copies placed at my disposal, up to 50 copies I am anxious to have copies any how.

I enclose the prospectus of a botanical work. Do you think there will be a chance of selling some in America? Dr. Seemann is gone to the Feejee Islands on some business of the English government.

Believe me to be very dear Sir, Yours most respectfully,
L. A. S. Gray. J. E. Tribner

London. Jan 22 1861

60. Paternoster Row. E.C.

Dear Sir, It will afford
us the greatest pleasure
to comply with your
request & that of our
friend Dr. Asa Gray.
We presume you will
write to the Doctor by
one of the first mails
and request you to say
that our imprint should
be put upon the pamphlet
exactly in the same
manner as it appears
on the enclosed title page
(i.e. form,)

We would rather not
now decide the question
of the price. It will be
safer to do so when we
have copies of the —
pamphlet before us, so
as to see what price it
will bear. We need not
say that in this respect
we shall altogether
defer to your wishes and
shall only advise you
according to our
convictions. The question
as to the amount to
be spent in advertisements

had also perhaps better
be left undecided until
we have the copies in
London.

We shall lose no time
in communicating with
you as soon as copies
have arrived — and
remain

Dear Sir,

Yours very resp^y,

Triebner & Co

Charles Darwin Esq

D^r Asa Gray

D^r

Cambridge, Mass., U. S. A

in account with

57 & 59, Ludgate Hill, London,

Dec^r 31st 1875 C^r

1875

Mich 11 On hand

3 Icons 34- 5. 8. -

2 Musci 34- 3. 12. -

Balance forward

9 - -

3 12 -

£ 12 12 -

1874

Jan 1 By Goods on hand

12 12 -

£ 12 12 -

Sep 24 1 Suppt to Sullivants Icons
to J. Braithwaite for Review
Carriage &c

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1875

Mich 11 Balance down

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25 2 6

£ 41 4 -

1876

Jan 1 Balance down

25 2 6

£ 41 4 -



57. & 59. Ludgate Hill.
London W. 6 1876
E.C.

Dr Asa Gray
Herbarium of Harvard University
Botanic Garden,
Cambridge Mass.

Dear Sir,

We beg to acknowledge the receipt
of your favour of the 20th ult. & in reply beg
to hand you statement of account to the end
of 1875 shewing a balance in your favour
of £25. 2. 6 - this sum we have requested
our Bankers Messrs Brown Shipley & Co to pay
you through their Agents in New York Messrs
Brown Bros & Co.

Trusting you will find the
account correct.

Very remain

Dear Sir

Yours truly
J. Trübner & Co

P.S. The Icons & supplement were advertised in
the 'Record' Nos 1124 & 113 (Jan 1876)

T^hunder



57. & 59. Ludgate Hill.
London July 5th 1870
E.C.

Dr Asa Gray
Herbarium of Harvard University
Cambridge Mass U.S.A

Sir/

Herewith we have the pleasure
to hand you Draft at sight on Messrs Brown
Bros & Co. for \$100 the equivalent for
the sterling amount £10.16.0 the cash price
you fixed in your letter of the 9th May
for 12 copies of the Synoptical Flora of
North America part I.

With best thanks

We remain

Yours faithfully
Trübner & Co.

101
5
101

1845

Received of the
Hon. Secy of the Navy
the sum of \$100.00

for the purchase of
a quantity of
the same for the
use of the
Navy

Hubbard

Dr

57 & 59, Ludgate Hill, London.

Pr

in account with Trulmer & Co

Memorandum.

From

TRÜBNER & Co.,

57 & 59, Ludgate Hill,

(Goods' Entrance, Little Bridge Street.)

LONDON.

June 12th 1884

To Prof. Asa Gray
Cambridge Mass.
U. S. A.

Please mark your reply "

" Department.

Dear Sir

Enclosed please find a cheque for
£ 2. 14. 6 as per statement sent herewith.

Please mark invoice order

Stock

TRÜBNER & Co.,
American, European & Oriental
LITERARY AGENCY,
57 & 59, LUDGATE HILL,
LONDON, ENGLAND.

Oct^r 23rd 1884

Please send as under as soon as possible
charged at lowest export prices, per Rough
-ton Mifflin & Co. with Invoice,
in parcel & we will remit
TRÜBNER & Co., per Josiah Child

2 Grays Flora Vol 2 part I

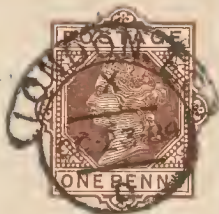
sent, charged \$ 7.50

Mr. B.

Prof. Asa Gray

UNION POSTALE UNIVERSELLE
POST CARD—GREAT BRITAIN & IRELAND
(GRANDE BRETAGNE ET IRLANDE)

THE ADDRESS ONLY TO BE WRITTEN ON THIS SIDE.



Kroff Asay. Gray
Harvard College
Cambridge Mass
U. S. A

TELEPHONE No. 1892.

TELEGRAPHIC ADDRESS

"TRÜBNER, LONDON."

Memorandum.

From

TRÜBNER & Co.,

57 & 59, Ludgate Hill,

(Goods' Entrance, Little Bridge Street.)

LONDON.

Mch 24th 1886
To Mr Wm. Jones

Dear Sir

We are in receipt of your note of
Mch 8th with invoice of the sale of the 4th ra.
Unfortunately we have 1 Vol 1 pt 2 & 3 Vol 2^{pts}
left. What shall we do with these? They
take off all the profit we have made
if they remain in our hands.

Yours truly

Trübner & Co
Wm. Child

"excellent eating", of a flavor "reticant aux
cardes", but more agreeable, and "which, when
planted, multiply in a marvellous fashion".
He thought these must be the "Afrodilles"
described by Pliny. These may be 'Opis
tuberosa' — but the description and the refer-
ence to cultivation are more applicable to
the Artichoke.

In Virginia, I find the Artichoke first named
as a plant cultivated by Europeans. In "A Perfect
Description of Virginia", 1649, the writer says that
the English planters have (among other good
things) "roots of several kinds, Potatoes, Sparagus,
Carrots and Hartichokes". Devereux, Hist.
of Virg. (ed. 1722), p. 254, mentions "Batatas Cana-
densis or Jerusalem Artichoke", among plants
sometimes cultivated by the English for brewing beer.

The modern French name "Topinambour"
looks to a Brazilian origin. It seems to be derived
(as Le Littré gives it) from the "Topinambour" of Brazil.
But the evidence is worth as little as that of the
name of the "Cog d'Inde" or "Turkey wheat".

Very truly yours,
J. M. Mendenhall

Hartford, 13th Feb. 1877

Dear Dr. Gray,

I believe — though I dare not
positively affirm — that the Indians of Canada
had the Jerusalem artichoke, before Europeans
brought it. I give you such notes as I have.

Parkinson, Theatrum Plantarum, p. 1583, has a good
figure of the plant, as "Battates de Canada, the
French Battates, or Jerusalem Artichokes".

Johnson, in Gerard, p. 753, names it "Flos Solis
Pyramidalis, Jerusalem Artichoke", and refers
to Parkinson's account of it. He attributes its
introduction into England, to Mr. John Jodger,
who "received, anno 1617, two small roots thereof
from Mr. Franqueville of London".

C. Bauhin (Pinax, 277) under "Flos Solis" &
"Flos Solis, flammus" — "Indicum maximum" (the
Sun flower), and "— "Indicum tuberosum: Chrys-
anthemum à Canada, quibusdam: Canada
& Artichoke sub terra, aliis: Gigantea, Burgundis".

I shall be pleased to know what you think of Gerard's evidence.

Parkinson (l.c.) refers to a description of the plant by Tab. Columna, under the name "Hos Solis Parnesiorius and Aster Peruvianus tuberosus". Columna is also cited by Mentzet (Index), who gives the names "Canada & Artischoki, Gigantia Burgundis Canadas," as from Ant. Vallot's Hortus Regius (Paris, 1665). I have not access to Columna or Vallot.

Sagard, Hist. du Canada (1636), p. 781, and Grand Voyage, p. 330, mentions the "roots that we call Canadiennes or Pommes de Canada, and that they [the Hurons] call Orasqueinta, which," he says, "are not very (assez peu) common in their country. They eat them raw, as well as cooked; as they do, likewise, another sort of root, resembling parsneps (panays) which they call Sondhrata-tes, that are, in truth, much bitter: but they seldom give us these, and only when we have made them some present or pay them a visit in their cabins." He goes on to speak of "patates", which he had seen on board an English vessel, but which were not to be found in the Huron country; and he

regretted that he did not bring some of them with him, for these," they say, if cut in pieces and planted in the earth, in short time grow and multiply, like the pommes de Canada."

There is not much doubt, I think, that the roots first described - the Huron Orasqueinta, Sagard's Canadiennes - were the "Artischoki & Canada" of Vallot, "Pattatas de Canada" - Helianthus tuberosus. In his Huron dictionary, Sagard repeats the name:

"Canadiennes. Orasqueinta."

Considering how easily the Artichoke is propagated and how quickly it propagates itself, the fact that it was yet a rarity among the Hurons may be an evidence that it was (in Sagard's time) of recent introduction. I find no certain trace of it, further east or south, till much later: but Lescarbot, Hist. de la Nouv. France (1612) p. 840, mentions a kind of roots "grosses comme navet", found in the country of the Armouchiquois (Canada & northern New England), which were

Hartford, 1st Feb. 1877

Dear Prof. Gray.

I have been trying to find time to do something more than acknowledge the receipt of your favor of the 15th - but I have not yet succeeded. In a few days, I will re-write my notes on the *H. tuberosus*, with some additions, and place them, with much pleasure, at your disposal. I have found the first published description of the species - by H. Colonna, in 1616 - and his more accurate description, published in 1651. I want to put together some notes on - what we may call the genus penak, of the Indians, comprising round and roundish esculent roots - tubers, corms, bulbs. The early writers have made great confusion of these.

The Indians had a tolerably good 'natural system' - better than European botanists found in

Threophrastus, to say the least, — and a genuine
binomial nomenclature; and an Algerian
herbal would, in the matter of systematic
arrangement, be a long way ahead of
Johnson or Gerard.

I remain, dear Sir,

Very truly Yours,

Samuel Fendley

Hartford, Apr 11, 1877

Dear Prof Gray:

The printers sent me a proof slip, which I returned yesterday. Yours was forwarded directly, this morning.

I see that you query my guessid "Sium?" I think the genus is right, but I was in doubt about the species. The root described by Sagard, I suppose to be that which the Canadians call "Queue de rat", and which is a favorite relish, to the voyageurs as well as among the northern Indians. Sir John Richardson, Boat Voyage, i. 95, makes it Sium lineare, and describes it as "a small white root, about the thickness of a goose quill, which had an agreeable nutty flavor". The Cree and Chippeway names of this root are, in both languages, transferred, with slight modi-

fication, to the cultivated radish, and carrot.

I added to the proof a specific name for the subterraneous "Tuckahoe,"— Rafinesque's "Gemmulaia" and "Tucabus". Wries—to whom I forgot to look, at first,— makes it "Pachyma cocos". There must be, I think, three or four American species of these truffles that were known to the Indians, by the general name of "Tuckahoe".

Very truly Yours,
J. H. Fumbrill

Hartford, Apr. 28, 1877

Dear Prof Gray:

In presenting the evidence of the use of the Jerusalem Artichoke by Indians of this part of the country, I forget to name Van der Donck, the author of a "Representation from New Netherland" (Vertoogh van Nieu Nederland) printed at the Hague in 1650, and of a larger "Description of the New Netherlands", Amsterdam, 1655, and again, 1656. He came to this country in 1614, and lived at Fort Orange, now Albany. In the Vertoogh (translated by Hon. Henry C. Murphy), Van der Donck names among indigenous fruits, "plenty of bilberries or blueberries, together with ground-nuts and artichokes which grow under ground." In the "Description" (N. Y. Hist. Soc. Collections, 2 Ser., i. 152) he says that there are "blueberries, raspberries,

Black-caps, &c., with artichokes, ground-acorns,
ground-beans, wild onions, and leeks like ours,
with several other kinds of roots and fruits,
known to the Indians, who use the same, which are
disregarded by the Netherlands, because they
have introduced every kind of garden vegetables,
which thrive and yield well."

Very truly Yours,
J. Hammond Trumbull

Hartford, May 19 1877

Dear Prof. Gray.

I have just returned from New York, and find yours of the 12th. I have rec^d no copies of the Antichoke story, and shall be glad to have four or five, if you can spare them.

I don't know how I came to forget that note of Dr. Parry's - against which a large  stands in my copy of Owen's Report. He writes the Chippeway name "ushkebuag" (not baug). In a little Chip. Spelling Book printed in 1846, it is "ũsh kũ buog"; and an earlier vocabulary (1820) gives the name of the plant as "shib-waw-we-gusk" (i.e. ushkebua-wegusk) which means, as near as I can translate it, "eaten-raw-root herba-
ceous plant" or, plant having a root which may be eaten raw.

You suggest the difficulty of accounting for the disappearance of the wild antichoke

—if it was introduced into New York so early,
and already regarded as indigenous, two hundred
years ago. But has it not "held its own" as well
as—for instance—*Opios tuberosa*? Brewster
tells us that, in the beginning of the 17th century
these "ground nuts" were found in great abundance
in every one of the Elizabeth Islands and in
almost "every part of every island". I have never
looked for them there, but I doubt whether a
peck could be dug in a week now. They have
within the last thirty years almost disappeared
from the places where I used to dig them when
a boy, in eastern Connecticut. The *Helianthus*,
like the *Opios*, is a nuisance, in cultivated ground,
and the farmer gets them out of his way. In
poor ground, the *Helianthus* soon "runs out",
I suspect: but it has maintained its place in the
corner or along the wall of almost every old
New England garden—and from a time whereof
the memory of man runneth not to the contrary.

I venture to send you a proof of
a note written for the next number of
the "Magazine of American History"—which
indicates the Indian mode of forming
specific names.

Very respectfully & truly Yours,
J. H. Trumbull

Stanford, Feb. 15, 1883

Dear Dr. Gray

Believe me that it is by no fault of mine, that your book and my notes have not gone to you before this. I have been for a fortnight on the sick list, and till today shut in doors under my doctor's orders. The book and such notes as I had made were in my private desk at the Library, and I could not get at them till well enough to go for them - as I have done to day. I will send them by express tomorrow.

I have made a good many pages of notes and extracts - ten times, at least, more than are required for your purpose, and few of which, comparatively, are adapted to it. But I thought it might

sometime be convenient to you to have
at hand such references to American
plants as I had noted from writers of
the 16th & first half of the 17th century:
and the meagreness of M. de Candolle's
citations of original authorities, in
other languages than French, led me
to do this the more carefully. Taken
sick - very uncomfortably, though
not very seriously - I was not able to
go through with my work.

Nothing that I send is in shape for
publication. If there is any thing that
you can use to advantage, I shall
be glad. If you follow any of my
quotations or references, please let a
proof be sent me that I may verify
them - if you have not the volumes
referred to immediately at hand.

Very respectfully & truly Yours,
Det. Grubb

Ornithion

Passiflora Granadilla.

Oxalis crenata

Tropaeolum majus Fr. Capucini Peru?

Capparis spinosa

Martynia proboscidea

? Carya olivaeformis

? Sabal Palmatto

Caryocar nuciferum Souai nat

Osculus Stippocastanum

Prophocarpus (Dolichos) tetragonolobus

Pachyrhizus (Dolichos) angulatus

— trilobus

Cornus Mas.

Hibiscus cannabinus, & St. Sabdariffa.

* Four leaves type on Juicilla

Rheum Rapaonticum

Salvia officinalis

Artemisia Absinthium, & A. Dranunculus

Origanum Majorana

Thymus Serpyllum, L. G. L.

in 1535 & 1536: "Ils font pareillement force
potaiges dudit bled & de febues, & poix,
desquels ilz ont assez," etc. (Brief Recit et
Succincte Relation de 1545, p. 24); and again
(p. 31): "Ils ont grand quantite' de gros melons,
concombres, & courges, poix, & febues, & de toutes
couleurs, non de la sorte des nostres." In the
Relation Originale of Cartier's Voyage of 1534
(Paris, Froes, 1867), the writer mentions the "gros
mil [maiz], comme poix, ainsi que au Bresil,
.... et des febues qu'i nomment Sake" (p.
39).

Champlain (Voyage, 1632, p. 286) says that the
ordinary food of the Attigouantans (a Huron
tribe) was "le bled d'Inde, & febues du Bresil".

Strachey (Historie of Travaille into Virginia, p.
117) describes the Indian manner of planting corn:
"they make a hole in the earth with a stick,
and into yt they put three or five grains of
wheat [maiz], and one or three of beanes...
Their beanes are little like a French beane, and
are the same which the Turks call garvances,

Hartford, 30th Dec. 1882

Dear Dr. Gray:

I have not seen Alph. DuRoi's
new book, though I ordered it last week.
If you will take the trouble to send me
your copy, I shall be glad to read it, and
to give you any notes I may find to make.
But my health just now is so very shaky
that I dare not promise much real work.

As to the cultivation of beans by the In-
dians, I have no proof that it began before
the coming of Strofim Karlsberg, or of
Madoc, — or that Columbus did not
bring with him, on his first voyage, an as-
sorted lot of squash seeds and beans for
planting — with a pre-aboriginal recipe
for succotash. What we do know is this, —
that the earliest voyagers and explorers,
in all parts of North America, found
beans cultivated by the Indians, and had

no doubt that the species (or varieties) so cultivated were indigenous.

Coviedo, in his Historia General y Natural de las Indias Occidentales, first published in 1526, and with additions, in 1535, in a list of plants introduced by the Spaniards into St. Domingo, names beans (fésoules), "such as in Aragon are called Judias, and in Castile arvejas Luengas"; but adds that in the main land, as well as on the islands, beans are raised in great abundance, and particularly in Nicaragua, where they are native (naturales de la misma tierra), and where great quantities are produced annually, of these and "of other beans (fésoules), of other sorts, of different colors; and other legumes, like havas, or larger."—Lib. xi. cap. 1 (ed. Madrid, 1857, vol. i. p. 273).

In another place (lib. vii. cap. 18) he mentions the "fésoules, as the Christians call them,—of which there are many sorts in the Indias—in the islands, and on the main, in New Spain and Nicaragua."

De Soto, in his march from Tampa Bay to the Mississippi, 1539-42, found, everywhere, maize,

beans, and pumpkins, cultivated by the Indians. In The Relation of the Conquest by "the Knight of Olas",—which I quote from Buckingham Smith's translation (New York, 1866)—mentions "much maize, beans, and pumpkins" found in the abandoned town of Uxachil: "the maize is like coarse millet; the pumpkins are better and more savory than those of Spain."

(p. 45). Near Tampa Bay, De Soto found "fields of maize, beans, and pumpkins, with other fruits" (p. 285). At Coligoa, in 1540, "beans and pumpkins were in great plenty: both were larger and better than those of Spain" (p. 122). Next year, at Catamaya, "they found in store much maize, also beans, walnuts, and dried ameixas [persimmons] in large quantities" (131): and, again, on the Rio Grande (Mississippi), De Soto's purveyors brought back from the Indian villages, "boats laden with maize, beans, dried ameixas" &c. (139).

To come north—Jacques Cartier found beans cultivated by the Indians of Canada,

and these kind of pulse they much esteeme for daynties". Capt. John Smith has this, in nearly the same words - with a misprint of "Garnances" for "Garvances" - in his General Historie, p. 28.

Josselyn, N.E. Rarities, 56, says that "Indian Beans, falsely called French Beans, are better for physick and chyrurgery than our garden beans": and in his Voyages, 73. 4, he mentions these "French beans, or, rather American beans" - of many varieties - "besides your Bonivis and Calavances, and the kidney-bean that is proper to Roanoke: but these are brought into the country; the others are natural to the climate"

Roger Williams, writing in 1643, mentions an Indian tradition, that the Crow brought them at first an Indian grain of corne in one ear, and an Indian or French Beane in another, from the great god Nautantouwito's field in the Southwest, from whence they hold came all their corne and beanes. - ⁱⁿ Key to the Language of America, p. 90.

Several writers of the 16th and first half of the 17th centuries, mention species or varieties of *Phaseolus*, brought to Europe from America: Pena and Lobel, Adversaria Nova, 1570 (pp. 394-5), under "*Phaseolus vulgaris* Turcicive multicolor Baba", say: "Permultas accepimus á naucleris fabas phaseolove ex Americæ novo orbe, æque Hesperia Africæ allatas, quæ mixtæ naturæ videntur, sed propinquioris Phaseolo," etc. Clusius, Exotica (1605), in Annotations on Monardus, describes (p. 336), with figures, & beans which he obtained from a French sailor in London, in 1579, brought from Brazil, "larger and broader than our common *Phaseolus*," and of various colors, "some yellowish or wholly white, other black or purple, other with purple and white spots". Parkinson, Theatrum Botanicum, 1640, says: "There hath come unto us both from Africa, Brazil, the East and West Indies, Virginia, &c., sundry other sorts and varieties [of *Phaseolus*], which were

7
needless to recite" (p. 1055). But these citations
are foreign to the matter in question— if the fact
of the cultivation of beans by the Indians of
N. America, from the Gulf of Mexico to the Saint
Lawrence, can seriously be regarded as in
question. Has M. DeCandolle heard of
the cultivation of maize, by the Indians?
As to squashes,— I shall be glad to see on
what his remaining doubt hangs.

Very respectfully & truly Yours,
J. H. Trumbull

Wm. A. D.

Hartford, Jan. 10th, 1883

Dear Dr. Gray,

DeCandolle's book was received last evening, and in spite of a severe headache - which has not yet left me - I did not lay it down till after midnight. I will try to send you a few notes on some of the American species, before many days; but I write now to call your attention to one curious oversight of DeCandolle, in his account of the Somato. He says (p. 232): "Je remarque cependant que le premier ouvrage sur les plantes de ce pays, ^[le Mexique] (Hernandez, Historia) n'en fait pas mention." On the contrary, Hernandez (ed. 1651, p. 295 ff.) has a chapter "De Somato, seu planta acinosa, vel Solano", - and describes several species, under their Mexican names, including one or two foreign species. As you doubtless have Hernandez at hand, it is needless to quote his descriptions.

When writing to you, the other day, about the cultivation of beans by the Indians, I

forgot to name Cabeza de Vaca, who was
in Florida five years before DeSoto. In his Relation,
first printed in 1542 (transl. by Buckingham Smith,
New York, 1871,) he mentions "maize, beans, and
pumpkins, in great plenty, all beginning to be fit
for gathering", July 28, 1528 - near Tampa Bay;
and notes the use of "beans and pumpkins," by
the western tribes [in Texas?] in a region having
"fine dwellings of civilization", &c.

I also forgot that I had sent some
notes on the cultivation of beans by the Indians,
to the Bulletin of the Torrey Bot^l Club, some
years ago. They were printed in Vol. VI, pp. 86, 87, -
and include some additional evidence.

Very truly Yours,
J. H. Fernald

P.S. I will not detain your copy of De
Candolle, which you were so kind as to lend
me, beyond Monday next.

Hartford, Feb. 26 1883.

Dear Dr. Gray:

I hesitate at sending you such a pile of notes as this - so much of which is repetition of what I have sent in another shape. But I have been reviewing all the evidence I could come at, as to the cultivation of Phaseolus in Europe, before the discovery of America - and the cultivation of one, two, or more species by the Indians before the coming of Europeans. On a single page, I have made a brief "guide-board" or table of contents - to save the trouble of reading more than you care to see.

The fact of the discovery of Kidney Beans

-or what were believed to be Kidney Beans -
by Columbus, on his first voyage, in Cuba,
is new to me, and I think has hitherto
escaped notice. What Mattiolo (1550)
says of the high-twining, many-colored
Fagioli of Italy - which some thought
had been recently introduced - seems
note-worthy. (I have never, till last week,
been able to get hold of Mattiolo's Com-
mentary on Dioscorides in the first
edition.) If there is any thing worth
using in the mass, you can pick it out
without much trouble, I hope. May
I ask you to lay aside for me, the overplus
for which I may some day have other
use?

I thank you for reply to my inquiry
about Bonafous. You intimate that

the silk is conclusive for Maize - and
so Dr. Bretschneider regarded it. I ought
not to have doubted, yet I could hardly
believe that a Chinese artist would represent
maize with a clumpy panicle at the top of
the stalk and no axillary spikes - and I
had wondered whether the silk was not
introduced or exaggerated in later editions
of the Pien Ts'o, from which Bonafous copied
it - perhaps with some extra-exaggeration of his
own. Except as matter of curiosity, the
identification of the species figured is of
no great importance - for Maize had
ample time to get from American to China
~~in time~~ before the Pien Ts'o was written.

I am, dear Sir, very respectfully
Yours,

J. K. Trumbull

Hartford, Feb. 27 1883

Dear Dr. Gray:

I cannot tell you just where it was that Champlain found the Hurons raising Sun-flowers: but it may be near enough for your purpose to say that Cabriagué was one of the principal towns of the Hurons, near the s.e. point of Georgian Bay, Lake Huron — probably in the present township of Matchedash, Simcoe Co., Ontario. This was the starting point of the expedition, which Champlain accompanied, into the Iroquois country — going southward, ^{east} by Lake Simcoe, and the River Trent, to L. Ontario.

You have a reference to Sagard's mention (Histoire du Canada, 1636, p. 785) of the cultivation of the Sunflower by the Hurons. He was in their country, about 1624. He says: "Ils font estat du tourne-sol, qu'ils sement en quantité en plusieurs endroits, à cause de l'huile qu'ils tirent de la graine," &c... "Mais comment est-ce que ce peuple sauvage a pu trouver l'invention de tirer d'une huile que nous ignorons, sinon à l'ayde de la divine Providence" &c.

I have not the edition of Champlain's earlier voyages (1630) in my private library, and a severe cold forbids me to go to the Watkinson Lib^y for it to-day: but I think the location of Cahiaque — which is well established — will sufficiently answer your question.

Very truly yours,

J. H. Brambley

P.S. March 2.

I open this to reply to yours, just received. DeCaisme is certainly wrong. The French re-print of Champlain, of 1830, is worthless - but even that has no error in the place cited. I have just been examining the re-impresion of the edition of 1619, edited by Laverdière (Quebec, 1870), with notes. In my letter, I give you the same passage, substantially, from the edition of 1632, which is now before me. The words "En remontant le St. Laurent et avant d'arriver au Lac Ontario", are not in Champlain, and have no other authority. Champlain, starting from Quebec - and so to Montreal - continued his voyage, from the Sault Saint Louis, "amont le fleuve Saint Laurent environ six lieues", to the entrance of the R. des Prairies (Ottawa River). He made his way to Lake Nipissing, then to the shore of Georgian Bay - which he followed southward to the southern extremity. The five Huron towns he names were within the "14 leagues" between "Caragouha" and Cabriague - the latter being the Huron name of the mission station of Saint-Jean -
(over)

Baptiste. "Ontario" was an unknown name, in Champlain's time. It is the Iroquois name of his Lac "des Entourhonorons".

DeCaen probably connected the "amont le fleuve Saint Laurent" with the mention, several pages further on, of the few Huron towns & the sun-flowers.

A long time ago, I thought of compiling a catalogue of American plants named by writers of the 16th (and last years of 15th) century; but I doubted if it would be of any use to botanists, and concluded not to undertake it. I am now more disposed to think well of it, and am not certain that I shall not try to make it - or, at least, a beginning of it. The arrangement of such a catalogue must necessarily be under popular names in European languages ("citrouilles", "cabeçaca", "fèves", &c.) and American names - with or without identification of genera or species. I would like to talk with you, some time, about the notion.

Very truly Yours,
J. N. Trumbull

Hartford, Mich 3^d 1883

Dear Dr Gray:

I have nothing worth sending you about Maize. Some years ago I began to make a comparative vocabulary of Maize names in American languages, in the hope of getting thereby some clue to the migrations of the plant and the history of its cultivation in N. America. But the materials for such a work are not abundant, nor always trust-worthy; and my vocabulary grows slowly. It shows me, however, that the New England (Algonkin) name is of ~~common~~ origin with the Carib, Maya, Muskoki, and some other southern names, and did not originally belong to the language of New England.

I have too often cut my fingers when "lopping stalks" not to remember how it was done, and I admit that the specimen Bonafous figures looks as if it had been subjected to that process. The Chinese characters under his figure (reading from right to left.) signify, respectively,
玉 'best' (literally, 'gem-like', 'precious')

蜀 'Sze-chuen' - the western province of China,
adjoining Tibet.

禾 水 'millet', generally: specifically, when standing
alone, panicled millet (*P. miliaceum*?).

The only possible interest this can have for you
is this: that the name, in this earliest drawing,
refers the plant to the extreme western province
of China, which adjoins Tibet.

In Egypt, the vulgar Arabic name for *Sorghum*
vulgare is Durra beledi, i.e. native Durra; the
name for Maize is Durra shami (or es. shami),
'Syrian (or Damascus) durra'. In neither China
proper nor Egypt was maize regarded, by name, as
indigenous.

When I was in Egypt in the winter of
1855-56, "mummy wheat" was yielding a
rich harvest to the vendors of sham antiques.
Almost every one of the thirty or forty Nile
boats I encountered at Thebes and elsewhere
carried down the river at least one specimen of
this precious grain. A venerable Copt who
carried on a large business at Luxor in the
manufacture and sale of 'antica', was kind

enough to invite me to visit his atelier. He
employed some twenty workmen, besides the peddlers
who sold his wares to travellers: and was turning
out all kinds of rarities - from brass sacrificial
vessels, to gold coins of the Grace-Egyptians and
the Lower Empire: All this work was done well.
He had then, in stock, at least twenty lots of
"mummy wheat" and mummy durra - nicely
put up, some in genuine antique pots, and little
vases taken from mummy cases; some in earthen
vessels, shaped nearly like soda-water bottles,
in which ~~the~~ mummified Ibises had been preserved
in the pits at Sakkara. Each of these filled with
grain from the nearest field - was irreproachably
sealed, with an impression of the hieroglyphic
cartouche of Rhotmes III, "the Pharaoh of the
Exodus", or some other scriptural Pharaoh popular
with travellers. I have met with specimens of
this "mummy wheat" - in the make-up of which
I recognized the handiwork of my old friend -
in several private collections in this country,
and in at least one public collection. "Supercherie
d'Arabe," as M. Defandolle says, p. 313.

Hartford, Mch. 10, 1883

Dear Dr. Gray:

I have just now put up for the printers the corrected proofs received this morning—though too late for sending them by the evening mail. How my slovenly notes have risen in judgment against me today!

I have not ventured to make any changes except in correction of typographical errors—of which there were plenty—and in a single statement into which I misled you by cutting short a quotation. Sagard (l.c.) says that the Hurons cultivate the Sun-flower, for the oil extracted from its seeds, "which serves them not only for greasing their hair, but also for eating, and several other uses". I have taken the liberty of modifying your statement—with as little alteration of the proof as possible.

Is it advisable to print the notes on Portulacae? I sent them, mainly, for your private reading. A page may be saved by

striking them out. I am afraid that - from a botanical stand-point - they tend to heresy, and if so, I do not wish to make you responsible for it, even by implication. I see that Colmeiro (1871) makes "Verdolaga de Cuba" = Claytonia perfoliata Dougl., "Verdolaga de Indias" = Sisuvium Portulacastrum L., "V. de la mar en Cuba" = Borreria arborescens Desf., and "V. de America" = Portulaca marginata & P. teretifolia N. B. & Kunth. It does not seem to me probable - hardly possible - that Columbus mistook for P. oleracea either a Claytonia or any plant with terete or conceolate leaves - but I intended to leave the question to your judgment.

I have just got hold of a copy of Matthioli, in the (2d) edition of 1559. I see that, in his description of "Cucurbita Indica", he expressly disposes of M. deCandolle's doubt as to the meaning of "Indica", by stating that ~~the fact~~ "several kinds of cucurbits" were so called, because they were reported to have come to Italy from the West Indies.

Very truly yours,
J. H. S. Humberly

Hartford, Mch. 14th 1883

Dear Dr. Gray:

I received a revise this morning, and with it the first proof. I send you the proof by this mail, and also p. 245 of the revise. If you care to mention the use of sun-flower oil by the Aztecs, "for eating", it will be easy to introduce the whole quotation (as enclosed) — or, to insert "also for food" (or something like it) in place of "other purposes".

I suspect, from your note of the 12th, that you thought I was needlessly troubling myself about the "Portany" — in re Portulaca: and if I wrote anything to give you that impression, I regret it. My scruple was only this: when I made those notes, especially the quotation from the journal of Columbus, I did not know that the old Spanish "verdolagas" could mean anything but common Purslain — or that any other species than Portulaca was used in Spain for salad. I do not know any better now — but ^{while I was} in my hunt through the dictionaries, I happened to recollect Colmeiro's list

of popular Spanish plant-names, and on reference to it found that "Verdolagas" had a much wider range than I had guessed: and I suspected that the same might be true of Old-French pourpie. Moreover, I was honestly ashamed to see my notes occupying so much space—and was disposed to get rid of a page or two, if I could.

I have looked over the copy of Part II., and made some abridgement and a few corrections in my notes: striking out the long, ^{one} Sycopersicum esculentum—for which I am glad that you have substituted, in a short one, all that is wanted. Ruellius supplies a fact and name for S. melongena that I am glad to get.

As to Beans—we will let them go for the present. One of these days, I will put together what I can pick up about them, and leave it in your hands.

Shall I return the copy to you? or forward it to New Haven, to the printers?

Very respectfully & truly yours,
J. N. Trumbull

To quotation from Sazard, p. 245, add - after
"qu'ils tirent de la graine,"

"laquelle leur sert
non seulement à gresser leurs cheveux,
mais aussi à manger, & en plusieurs
autres usages."

(And the pious reflection, ~~now~~ from "etc." to
"Providence" may be struck out, to make the
space.)

Hartford, Apr. 10^c 1883

Dear Dr. Gray:

I have been seriously - though I trust not dangerously - ill, and until today have not written even a business letter of more than half a dozen lines since my note to you of Mch. 21st. This afternoon I sent the books and copy, nearly as I received them - except for changes of which you are already informed. Tomorrow, I will try to put together some notes on Phaseolus vulgaris - but the more I study the matter, the less light I have on it, and I have none of the recent monographs, even Saini or v. Martens, within my reach. Except as regards the proof of cultivation by the Indians, from the first coming of Europeans, I can add nothing to M. de Candolle's summing up. I can hardly doubt that the twining plant with kidney-shaped seeds, which Dioscorides described as "Smilax hortensis", and which

Scrapion in the 10th century identified with
the Phasiolus and Smilax hortensis Dioscor., was
— either Phaseolus or Dolichos. The latter, I guess.

From Galen to Marcellus Vergilius (1529)
no two botanists are in accord: and no
modern writer (M. def. not excepted) seems to
have found a way of reconciling their differences.
"Theophrasti Dolichus,.. Siliqua, quam Galenus
Phaseolum seu Phaseolum nominavit,.. verba
magnae inter doctos contentiones occasio
fuerit!" — says old Tragus.

Shall you go the meeting of the N. A. S. next
week? I hope to be able to get to Washington, —
but am as yet very doubtful.

Very truly Yours,
J. N. Trumbull

P.S. You will see that I put in a note, for
your own reading, on Lycopersicon. I think
the statement of Def., as to the attribution to Peru,
by 16th cent. botanists is much too sweeping.

THE WATKINSON LIBRARY,

Hartford, Conn., May 9th 1853

My dear Dr. Gray.

On my return from Washington I found myself over head and ears in an accumulation of library-work—which I had scant strength to undertake. I was all last week in New York, attending a book-auction, and availing myself of the opportunity to get one or two woodcuts of Phascolia. On my returning, Saturday, P.M., I found a post from Mr. Dana—with a summons for copy. Went to New Haven, on Monday,—saw him—and, finding less than three pages in type, promised, to his entire satisfaction, to furnish the maps & beams for the next number. I received the woodcuts to day, and enclose proofs of them. Aren't they curious? They date from 1480 to 1511.

I am afraid I must ask you to spare me a few copies of the first article. I wrote, asking for 20 copies,—but have received none, and the foreman says he thinks my note was watered, or was not given to him before the forms were distributed.

Yours truly, J. N. Trumbull

P.S. After long tribulation, I rec'd my copy of Requiescitur, from Paris, yesterday.

P.S. I have been amused at the interest manifested in the finding of Subularia aquatica, near Echo Lake, last season, by my sister, Mrs. A. F. Stepm. Since the publication of a note on the "Flora of the Franciscan Mountains," in the Bull. Torrey Bot. Club for March, she has received more than a dozen letters of inquiry, as to the precise locality, date, &c., with propositions for exchange &c. She gave a day to a special search for it, and happened upon it at the last hour.

Hartford, July 27th, 1883

Dear Dr. Gray:

I wrote you a long letter last evening, in explanation of and apology for my hurried postal of the 24th. Yours, just now received, relieves me, in part.

Die Gartenbohnen by Dr. G. von Martens was published some twenty years ago, and in a 2^d edition, with additions, Ravensburg, 1869, — with 13 colored plates (and excellent ones) of Phaseoli. The work is cited by DeCandolle. I first saw it some ten years ago, and made some notes from it, — particularly, on the identity of Dolichos ^{ela} megaphthalmos Def. with the "Phaseolus vulgaris sticticus humilis var. minor cum orbita nigricante" of Bauhin's Hist. Plant., II. 258, and the "vulgaris Phaseolus" of Matthioli. But I could not put my hands on the book, here, — and did not like to trust my notes without verification. I received a copy from Germany, ten minutes before my postal

card to you was written - to catch the night mail.

The presumption is, certainly, very strong, that the *Phascelus* of Southern Europe, in the middle ages and to the 16th century, was a *Dolichos*, introduced from the east; and that the "*Smilax hortensis*" of Dioscorides and the middle-age Arabian herbalists who introduced Dioscorides (and Theophrastus) to European botanists, was of the same genus. The ample description of the *D. melanophthalmos* given by Von Martens agrees with that of the *Phaseolus* of the 13th century, by Albertus Magnus (quoted by DeCandolle) and that of the "*Vulgaris Phaseolus*" of Italy, by Matthioli. The "*erlis Phaseolus*" of Virgil - and Crescenzi - may have been "*Orobis*", "*Erubia*", or "*Cicer*".

I hope at some time to be able to trace the history of the names *Phaseolus*, *Dolichos*, and *Erubia*, more thoroughly than Von Martens or Def. has done, from Theophrastus and Dioscorides, through their Arabian and Jewish interpreters, to Europe in the 15th century: but this would

have required more time and space than could have been given to the J. of S. article.

From your reference to the wood-cuts, I am afraid you did not revise my proofs - which I expressly asked should be sent to you for "incision and excision": for the wood-cuts went in - as curiosities merely - with the article in the Journal.

I was sorry to hear that you were not well when you wrote last, but I trust the indisposition was but temporary. I am still troubled with head-ache, but since the "fevered term" has past, I find myself in better working order.

I remain, very respectfully,

Very Yours,

J. St. John

THE WATKINSON LIBRARY,

Hartford, Conn., Aug. 5th 1884

Dear Dr. Gray:

It would give me great pleasure to undertake the preparation of such a paper as Mr. Tylor asks, — and greater pleasure to know that you would stand its sponsor at the Montreal meeting. But my health and strength will not permit. I am far from well, and have not very strong hopes of being better. My desk-work is reduced to a minimum, and barely suffices for the inevitable duties of the day. I dare not add even a scruple to the pressure.

I have made some collection of materials, for tracing, by the evidence of language, the derivation of the culture of maize and tobacco by the natives, of different parts of N. & S. America: in the hope of throwing some light — as Mr. Tylor suggests — "on race-migrations and civilization on the continent." But these collections are undigested; and insufficient to justify deductions.

To add to them, from all available sources, and to reduce them to tolerable order, needs time and study — and, as I have said before, I can give neither.

For your very generous recognition of the small contributions I have made to your work, in geographical botany, I can only say that I appreciate it as highly as if I deserved it.

Very respectfully & sincerely yours,

J. K. Fernald

P.S. My sister, Mrs. Stapson, who is an enthusiastic collector, wrote a short series of articles on "Wartford Wild Flowers," for one of our daily papers, — for the purpose of encouraging an interest in botany, among school girls and young ladies hereabouts. I take the liberty of sending you copies — in proof that your leaven is working, even in out-of-the-way places. The list in No. 6 is restricted to plants actually collected in May & June. It does ^{not} include, e.g. Arisaema Dracontium (though it grows in the "South Meadow" here) because neither of us found it this season; nor Castilleja coccinea, to be found (when found) in two or three places within the city limits;

THE WATKINSON LIBRARY,

Hartford, Conn., Nov. 12th 1884

My dear Dr. Gray:

I have forwarded your answer to Major Powell, with a word, to say that I have nothing to add to the notes in the article in the *A. J. S.* to which he refers. To you, I do not hesitate to confess my belief that gourds, of some sort, were common in tropical America before the advent of Columbus: But whether or not these gourds were of the genus *Lagenaria*—or nearly related to it—I cannot say. Possibly, as remote from it, as the Calabash tree is: possibly, of a genus or species that has disappeared, before *Lagenaria*, as completely as—for a similar reason—*Vicia Faba* from New England gardens.

And to you I may also confess my want of sympathy with—or rather, of my lack of interest in, certain methods of research, in American archaeology,—such as, the demonstration of an assumed fact, by a conjecture, or even by an hypothesis plus a probability.

And I am, especially, suspicious of this sort of
deductive-induction when it is brought to bear
on the works of the "Mound Builders" - whoever
they ^{may} have been - and the Pueblos.

The vessel, No. 6, of Major Powell's & Mr. Holmes's
ground-forms is, without much doubt, "derived from
the double gourd, which it perfectly resembles, and which
is so common in some parts of Texas and New Mexico
that it is in universal use by travellers". It was figured
by in Whipple, Edwards, & Turner's Report (Pacific R.R. Sur-
vey), 1855, with other specimens of Pueblo pottery, and
described, p. 46, as "of modern Zuni manufacture".

As for my health - I cannot say much. In the
vernacular of New England, "it's nothing to brag
on". I am not well enough to really work, and
I do not often venture to leave home. I was in
Boston a few weeks ago, and went to Cambridge
mainly to call on you, and to see the garden in
autumn; but I learned from Mr. Winsor that

you had not yet returned from your western
excursion. I shall hope for better luck next time.

Very sincerely Yours,
J. D. Drumheller

Trumbull

Hartford, Mich 3 1887

Dear Dr. Gray:

Make such use of the notes on
Asimina as you think best, though I
do not wish it to be understood that,
as written, they were intended for
publication, and certainly I should not
have offered them for publication, unless
after submission to your judgment. I
wrote them, mainly, because of a reference
to the name, in "Field, Forest, and Garden Botany",
as "C. reale",—and to give you, personally, the
evidence, that it was of Illinois-Algonkian
origin; knowing that the substance of my

northern Argentina, assini-minak, or assini-minar - means
'stone fruit'; but neither of these names was given to the
"pawpaw". In Virginia, the name was given to one of the walnuts;
probably, Carya tomentosa, - 'hard shelled' or 'stony'.

As to "Opunak" - I am confident that it was (I should
say, they were) not the cutores of S. tuberosum.

Very truly yours,

J. G. Humboldt

notes could be "boiled down" into half a
dozen words, - as against the "simian" origin
of the name. By the way, Dr. Bartlett,
"Dictionary of Americanisms" (s.v. Papaw),
says:

"By the French of Upper Louisiana and the
Canadas called Assiminier (Michaux,
N.A. Sylva, vol. II. p. 33), whence the name
of the genus, Assene-minnar, stony fruit.
The fruit contains several large triangular
stones" [?]

But "assimina" does not contain
the characteristic n which, in the Illinois
and all nearly related dialects, is essential
to "stony" or 'stom' as an adjectival. In
the Illinois, assene-misa, - in the

of the "crops" of corn, beans, and pease,
"besides the Macócquer, Melden, and
Planta Solis."

(I have underscored, in red ink, the
words which seem to me most noteworthy)

Gerarde (1597; p. 257) says that the
"Garden Orach" — "Atriplex sativa" — is
called "in Dutch, Weld", but this is clearly
a misprint for Meld. Sewd's Dutch
Woordenboek gives "Melde (ziken
kruid), Orache, the golden herb." The
old herbalists (as Fragus, 1552, p. 311) give
"Atriplex, Germanis Mitten"

Can you tell me what was Harriot's

P.S.

March 10th 1887

By the date of the preceding, you will
see that I lost no time in replying to
your postal card of the 2^d inst.; but after
writing, I held back my answer until
I could find opportunity to re-examine
the etymology of Illinois, "Rassimina", and
since then my house has been on fire, and I
have been driven from my writing desk. For-
tunately, my loss is small, and my books
are safe, but everything has been topsy-
turvy, till today. This, by way of apology.

On reconsideration, I think the con-
jectural analysis of the name "Rassi-

mina" (as "sleeve fruit") should not
be printed, at present. I am not sure it
is right, and I do not like to be responsi-
ble for a guess.

I am ashamed to trouble you with
a question, - and I would not venture
to do so, if it did not relate to a matter
in which I know you are interested. I
cannot ask it without a short preface.

Harriot, in his "Briefe and true report.. of
Virginia" (1589) names among the plants
"sowed and husbanded" by the natives, "an
" herbe which in Dutche is called Mel-
" den. Some of those that I describe it
" unto, take it to be a kinde of Orage;

" it groweth about four or five foote
" high: of the seede thereof they make a
" thicke broth, and pottage of a very good
" taste: of the stalks by burning into
" ashes they make a kinde of salt earth,
" wherewithall many use sometimes to
" season their brothes; other satte they
" knowe not. Wee ourselves used the
" leaves also for pothearbes". (p. 94).

On the next page he mentions the
planting of beans and pease among the
maize, and "in diuers places also among
the seeds of Macócquer ["Pompions"],
Melden, and Planta Solis ["Helianthus
annuus"]; and in another paragraph speaks

"Melden", — cultivated by the natives, in
1585, — its leaves used by the English as pot-
herbs, — ~~and~~ its stalks when burned yielding
"salt earth", — and growing 4 or 5 feet high?
I think it must have been one of the
Chenopodiaceae, — but of which genus and
species? I can get no clear light from
Clayton — or Chapman.

^{ask of this,}
the reference to the use of ~~the~~ ^{the} Melden
for a substitute for salt is of interest. The
Indians of New England did not use salt,
and had no name for its taste that dis-
tinguished it from 'sour', or 'bitter'. ^{So} ~~The~~
West, where rock salt or salt springs were

found, they did use it. This mention, by
Harriet, of the manufacture of salt ash,
is the only reference I now recollect, to
its use - or to any substitute for it - on the
Atlantic coast.

Pardon me so long a letter on so
small matters, and believe me, dear Sir,

Yours sincerely,
J. H. S.

W. J. Tucker
Ardmore,

Jan. 7, 1886.

My Dear Sir:

The order, which
you sent in your letter to
Professor Harris, for 100 extra
copies of your article was
overlooked as the correspond-
ence passed into the hands
of Professor Smyth. I very
much regret the delay.

The order has been sent
to the press & will at once.

I send on check for \$3.00.

in acknowledgment of the
publication of the article, in
which I trust that you
will accept, ^{with} our most
sincere thanks. We are
greatly indebted to you
for so charming and apt
discriminating a word
about Agassiz.

I am,

in high esteem,

Very truly yours.

Wm J. Vacker.

To Professor Asa Gray,

Cambridge Mass

of the scientific writings of the
late Mr. Henry James Clark.
In 1856, he published a paper
entitled "The Peculiar Growth of
Rings in the Trunk of *Rhus*
toxicodendron". I should be very
glad to know where this paper
appeared, and also whether
another paper of his, viz., "The
Eccentricity of the Pith in *Ampel-*
opsis quinquefolia and *Celastrus*
scandens", was ever published.
These excepted, I know of no
botanical writings of his.

Very truly yours,

Frederick Tuckerman

P.S. I enclose a list of a few
errors ^{with corrections} which probably you have
noticed in the paper I sent
you.

Amherst,
24 April, 1886

Dr. Asa Gray,
Cambridge.

My dear Sir, -

I send, as
you request, a list of those
of my uncle's literary writings
of which I have knowledge.
No doubt there is more literary
work of his, minor contributions,
etc., of which there is no trace.
He began to write at the age
of fifteen, while a boy at
the Latin school.

The Lichen-collection he
makes no reference to in his
will, nor have we yet found
any written directions concerning

the disposal of it. I think
he felt placed in a some-
what delicate position here.
For many years, as you no doubt
know, he was only nominally
connected with the college,
and on several occasions re-
quested that his name be
omitted from the catalogue,
a request that was never
heeded.

Amherst college would, naturally
perhaps, expect to receive this
collection, although, beyond
question, it would be buried
and utterly useless here, and
would undoubtedly ultimately
go to destruction for want
of proper care.

Except for my uncle's peculiar
relationship with the college,
I think that he would have
given it to Harvard. Under

the circumstances he died,
nothing about it so far as
we have yet learned.

We have not yet found the
MS. of the second part of the
"Synopsis", but in all prob-
ability it is in Boston, and
possibly with it may be a
statement as to what he
wishes done with his collection.

My desire is that it should
go where it will be utilized,
and I shall use my influence
to the utmost in favour of
Harvard college. It would be
almost wicked to allow it to re-
main here and be neglected
as it certainly would be.

I will take this opportunity to
speak of another matter which
I trust will put you to no
trouble. I have been at work
for sometime preparing a list

Leicester,

18 May, 1886

Dr. Asa Gray.

My dear Sir, -

I thank you
for sending me Dr. Müllers
letter to read. If no written
directions are found the
passage in Dr. Müller's
letter concerning the dis-
position of the collection
should be taken as conclusive
evidence of the intent of
my uncle.

It is very kind of you

to think of sending me a
proof of your sketch of my
uncle read before the
American Academy; and I
am only sorry that it
will not be possible to
add ^{to it} that the collection
goes to Howard College.

My uncle's estate has not
yet been settled, and until
that is done, and access
has been had to all his
papers, nothing definite
can be said about the
herbarium. Provided we
find no directions about it,
the passage in Dr. Müller's letter
used, so far as I am concerned,

set the matter at rest
and be the most desirable
solution of the difficulty
possible.

Yours very truly,
Frederick Tuckerman

added to the list of publica-
tions.

Lichenes, Explorations and
Surveys for a Railroad Route
from the Mississippi River
to the Pacific Ocean, 1854-55,
Vol. VI., 1857, p. 94.

Lichens of the U. S. Geological
Exploration of the 40th
Parallel, vol. V., 1871, pp. 412, 413.

I took the liberty of correcting
a few typographical errors;
but you see I have nothing
of consequence to add or sug-
gest.

Thanking you again for your
kindness, I remain,
very truly yours,
J. Tuckerman.

Amherst,
22 May, 1886

Dr. Asa Gray.

My dear Sir, -

The proof
of your very appreciative
sketch of my uncle's life,
character, and work, came
here yesterday, and I have
little if anything of importance
to add to it or to suggest.
I thank you very much for
writing it, and for extending
to me the privilege of seeing
it before it appears in the
annual report of the Academy.

I think it would please
Mrs. Tuckerman were the sen-
tence "Some of them are said
to be rather caustic" (referring
to the articles in the Relictie)
omitted.

The first paper on Lichens
appeared in 1838 being com-
municated to the Boston Society
of Natural History in that year.

The short articles contributed
to ^{the} Mercantile Journal in 1832,
as well as all of the others,
are preserved in his scrap-
book, so there is no doubt but
what he wrote them.

In the list of his writings
I notice a few mistakes,
probably most of them are
mine.

The [2] Supplement & an
Enumeration of North American
Lichens, etc. will be found
in (Am. Jour. Sci.) vol. xxviii
although it is changed in
the proof & vol. xxvi.

Carex glaucocarpa (Proc. Am. Acad.,
vol. vii) should read p. 395 not
375.

Lesidea elaeus (Flora) p. 65
not pp. 63, 64 [I take the page
from my uncle's copy]

Lichens of Arctic America - pp. 167,
168.

Agassiz's Account of a Journey,
etc., Boston, 1806, pp. 170-174.

The two contributions below,
if you think best, might be

12 Redwood St.,
Newport, R. I.,
12 September, 1888

Dr. Serena Watson.

Dear Sir,-

Your postal
came yesterday. I think
you must be mistaken res-
pecting the authorship of the
biographical sketch of the late
Edward Tuckerman which
appeared in the Proc. Amer. Acad-
emy and, later, in the Amer.
Journ. Sci. The Journal,
if I recollect right, gives the
names of the author.

I had considerable
correspondence with Dr. Gray
while he was preparing his
notice of my Uncle, and
supplied him with many

P.S. Dr. Gray's sketch of Darwin
in Nature (Series of Scientific
worthies"), June 4? 1874, of
which you index the reprint
in Amer. Nat., I suppose you
intentionally omitted, but
I mention it.

facts, and also sent him the
list of writings which follow
the notice. Dr. Gray, moreover,
sent me the proof to examine
and several copies of the
reprints, from both Proceedings
and Journal, together with
letters he had received
respecting his memoir. In
the absence of these facts,
however, the authorship of the
sketch is clear from the
passages in which Dr. Gray
refers to himself. The only
sketch of Prof. Tuckerman
written by Dr. Darlow (that
I know of) was one for
the National Academy.

Yours very truly
Frederick Tuckerman

Coates College for Women.

Terre Haute, Ind., April 12 1890.

Dr. Sereno Watson,
Harvard Botanic Gardens,
Cambridge, Mass.

My dear Doctor,

Gray's New Manual (by Watson & Coulter) says *Viola pedata*, L., var. *bicolor*, Pursh, is most common on shales of New Jersey. May I suggest the possibility of a typographical error here?

It occurs on the shaly hills surrounding Cumberland, Md., by the acre and by the million. The type is very sparingly found. Certainly less than 1% of *V. pedata* is the type. This fact seemed to me of special interest, since in every other place where I have found it, the variety has been scarcer than the type. Learning of special interest, I mentioned it to you last summer (Mr. Ganong having taken me into your "work shop") - You made

Coates College for Women.

Tone House, Ind., 18

a note of it.

Now, I lived for over 20 years in N. J. and have botanized considerably in different parts of the state. Nowhere did I find the variety abundant. My botanical friends say they have not observed that the variety was peculiarly abundant on "the shales of N. J."

May I not suggest that the compositor read "Md." as "N. J."? I cannot conceive how it could be more abundant than it is at Cumberland, Md.

Should you desire to verify what I say you can have specimens collected and data given by Mr. Howard Thriver, Cumberland, Md. Mr. Thriver, you doubtless know. He was an old friend of Dr. Gray's.

I wrote you a couple of weeks ago relative to a plant or two. Will you kindly take time to write me ~~at~~ once on what I have said above, as I am preparing a paper for next Friday, night and wish to incorporate what you may say therein.

Very truly yours, Jos. H. Tudor

Cher M.
M. de Tussieu

Paris 26 mai 1853.

Continuant, c'est à dire que les meilleures
volontés, les plus généreux courages, rencontrent
souvent des obstacles insurmontables, à la réalisation
de leurs desseins.

M. de Tussieu est toujours très souffrant,
ses amis & ses nombreux élèves s'en affligent beaucoup,
car ils appréhendent d'en être privés avant le temps
que son âge semblerait devoir indiquer.

Vous savez sans doute que M. Mequin-Landon
remplace à l'école de Médecine M. Ach. Richard, &
qu'il est remplacé lui-même à l'école par le jeune
Dr. Chos. M. Dunal se fait suppléer cette année par notre
ami Planchon.

Agrezy, je vous prie, Cher Monsieur, l'assurance
réitérée de toute ma gratitude, de mon respect & de
mon affectueux dévouement
Edm. Lullmann

Cher & très honoré Monsieur,
Il y a bien longtemps déjà que nous avons
renu au Muséum les plantes sèches & la précieuse
collection de livres & brochures que nous annonçait
votre aimable lettre du 10 mars dernier; pour ma
part, je vous suis en ne peut plus reconnaissant de
tout ce dont vous avez bien voulu disposer pour moi,
& je vous l'avouerai même, je suis confus de tant de
généreuse libéralité lorsque j'ai si peu fait pour
la mériter. Si je n'étais pas été très souffrant depuis
six semaines, je n'aurais pas attendu à ce moment pour
vous adresser mes bien sincères remerciements; je désirais

aussi vous pourriez dire que j'ai touché le mandat
de 19.5 f. sur T. B. Baillière, que M^r de Tournay
m'avait remis de votre part; Or je l'ai touché
effectivement il y a une douzaine de jours & je vous
dois encore pour cet objet un large tribut de
reconnaissance. Votre généreux concours pour le placement
de mon livre me portera bonheur & m'en fera, j'en suis
assuré, trouver le placement complet. Il y a je crois
en votre pays un Mycologue, M^r Ravennet, qui
devrait souhaiter d'avoir le volume.

J'ai trouvé, dans l'envoi que vous m'avez si
obligeamment fait, deux exemplaires des 2 dernières parties
de tome II de la Flore of North Amer. - Je tiens

naturellement l'un de ces exemplaires à votre disposition
& j'en ferai l'usage que vous souhaiterez. Je fais bien
des vœux, avec tous les vrais amis de la Botanique,
pour que vous trouviez un jour le loisir de terminer
cet intéressant ouvrage que vous pourriez enrichir
de tant de nouvelles découvertes. J'admire
toujours vos illustrations des genres de plantes
américaines & je vous félicite d'avoir à votre
aide des Artistes dessinateurs & graveurs tels que
l'Europe pourrait vous les envoyer. C'est encore le
cas d'exprimer le regret que cette belle publication
soit autre interrompue - je vois qu'il n'est hélas
de l'autre côté de l'Atlantique comme sur notre ancien

j'ai emprunté les fragments que je vous envoie.

J'ai seulement le regret de ne pouvoir y joindre des feintes, car je n'en découvre point dans nos herbiers. Toutefois, j'ai fait que vous m'en ferez l'occasion, croyez, cher Monsieur, que je m'estimerai heureux de vous pouvoir être agréable & bon à quelque chose.

J'ai appris avec bien du plaisir que les Fungi Hypogaei sont enfin arrivés à leur destination. M. Bonange m'avait un peu tranquilisé sur leur sort en m'écrivant qu'il n'avait pu les faire partir d'ici que le 12 avril, quoiqu'il les eût entre les mains depuis le 17 février. Je lui fais remettre aujourd'hui même un exemplaire de mon mémoire sur les lichens que vous me faites l'honneur de désirer, ainsi que quelques autres petites brochures.

Je ne me vante plus, cher Monsieur, que la place nécessaire pour vous offrir la nouvelle assurance de tous vos respects & de mon affectueux dévouement.

C'est à vous,

Paris, 4 août 1853.

Cher Monsieur,

J'ai reçu les deux lettres des 16 Juin & 6 Juillet que vous m'avez fait l'honneur de m'écrire &

dans les quelles vous me donnez de nouvelles preuves d'une bienveillance à laquelle je suis extrêmement sensible & dont je ne saurais assez vous remercier. Nous serons tous heureux si que vos études vous ramènent

à Paris dont les collections publiques & privées renferment de trésors que vous saurez si bien mettre à profit pour la publication des ouvrages auxquels

vous travaillez. Mais hélas vous trouveriez
parmi nous un grand vide; nous avons eu, il y
a un mois, la douleur de perdre M^r de Tullien
qui était, comme vous le savez, d'un bon muscle
si sûr, si profitable, pour tous ses amis, il n'en
est aucun qui ne le regrette extrêmement; pour moi
sa particularité sa mémoire sera toujours chère, car
il a consacré beaucoup à diriger mes premiers pas
dans la carrière botanique. Vous aurez appris
sans doute que la chaire qu'il occupait au Muséum
a été brusquement supprimée, au profit de M^r
de D'Orbigny pour lequel on a créé une chaire
de Paléontologie. Le Conseil d'Etat du Ministère
a naturellement contisté plusieurs de
Botanistes, s'il a satisfait les géologues.

M. Cl. Gay auquel j'ai offert comme vous m'en
aviez chargé, les fasc. 2 & 3 du tome 2 de l'Herbier
Flora Américaine, m'a dit qu'avant de les
accepter il rechercherait s'il possédait le premier volume,
son appartement est devenu beaucoup trop petit pour
l'immense quantité de livres qu'il y a accumulés,
& je crains qu'il n'ait quelque peine à trouver
parmi eux votre in 8°, quelque belle apparence
qu'il ait.

Je vous envoie sous le pli des feuilles seules
de l'*Acacia heterophylla*, tant de celui qui est
cultivé dans nos serres que de celui qui croît dans
l'île Bourbon; M^r Richard directeur du Jardin
Colonial de Bourbon a lui-même recueilli dans
les montagnes de l'île les échantillons auxquels

Paris, 18 avril 1854 -

tun vivement à la chose, ainsi que MM. Brongniart &
Decaisne.

Depuis que ^{j'ai eu} ~~vous m'avez fait~~ l'honneur de m'élire,
l'Académie des Sciences, a réalisé les vœux que vous vouliez
bien faire pour M. Moquin-Tandon et pour moi; j'ai été
 élu le 9 Janvier, si indigne que je fus de remplacer un
savant homme M. de Tussieu, de si regrettable mémoire; &
M. Moquin l'a été lui-même le 20 Février. Il reste
encore à donner un successeur à M. Gaudichaud
que nous avons perdu le 16 Janvier. Vous voyez
qu'il ne reste plus que M. Brongniart pour représenter
la Section de Botanique de l'Institut telle qu'elle était
lors de votre voyage à Paris.

Nous avons reçu quelques Cryptogames et surtout des
Champignons de M. Ravenel qui habite l'autre Canal

See the 10. ap. 1854 (or the end -)

Cher Monsieur,

Il y a quelques jours seulement, que
mon collègue & ami M. Weddell me remit votre
aimable billet du 2 Février, lequel était contenu
dans une lettre que lui-même venait de recevoir. Je
me suis empressé de faire les recherches que vous
vouliez bien me proposer, et j'ai été assez heureux pour
trouver dans nos herbiers la plante qui avait été décrite
par A. Richard sous le nom d'Hydrocotyle glaberrima,
& étiquetée ainsi de sa main. J'ai trouvé aussi la

même plante dans les collections envoyées de Chili par
Bestero; elle y est étiquetée par Guillén de la Lota:

^(de l'île S. Juan Fernandez)
"Mirabella glechomoides Best. mss. = Hydrocotyle glechomoides

Rich." Cette plante est positivement une Euphorbiacée! la publication de vos magnifiques illustrations des
et il me paraît que la genre qui la réclame ne saurait être Genus americana, ou que vous prépariez la fin des

très éloigné des Tragac; je m'exprime ^(quant à la dernière partie) ~~avec~~ avec doute, parce que votre intéressante Flore des Etats Unis; ce sont là deux
la plante semble étrange & que je ne l'ai pas étudiée sérieusement. beaux titres à la gratitude des Botanistes.

Nois n'en avons d'ailleurs que deux ou trois ^{(dont l'un a été envoy fidèlement dessiné & figuré par Richard (Mouss.)} ~~specimens~~ ^{pl. 58 fig. 17)} ~~specimens~~. On s'occupe beaucoup en ce moment de fonder

Surplus cette même plante est tout à fait différente de
ici une Société botanique de France, destinée à lier des

Chrysophanum macranthum Hook. dont vous m'avez
rapports plus faciles & plus multipliés entre les botanistes

envoyé quelques fragments, il ne m'a pas paru nécessaire
français ^(entre eux & les botanistes) & étrangers, car les derniers sont ^{auts} sollicités

d'en faire un examen plus approfondi.
à honorer la Société de leur souscription. M. Pavy, leur

S'attendre avec impatience les précieux brochures des fondateurs de notre Société géologique de France, l'intérêt

Paris, 12 Juin 1854

La description d'un certain nombre de Mousse
des îles de l'Océan pacifique. Les botanistes de
l'Ancien monde vous envient justement, Monsieur,
la fécondité scientifique dont vous au levez de vous
donner de nouveaux témoignages; elle est au niveau
des innombrables richesses dont vous êtes entouré.
Pour nous, il nous faut faire des emprunts quotidiens
aux trésors du nouveau monde, pour nourrir notre
activité, aussi languit-elle plus que si elle abondait
était davantage à notre portée.

J'ai appris hier que les lettres de Chomel & de Linné
que vous avez publiées étaient arrivées à Paris; M. Bonnier
en a offert un exemplaire à l'Académie des Sciences.

Adieu, Monsieur, croyez-moi toujours avec
respect, votre bien affectueux, dévoué

J'espère que ma lettre du 18 avril dernier
vous est parvenue depuis longtemps.

Edm. Lulau
43, rue de Valenciennes.

Cher Monsieur,

De retour à Paris les jours-ci, après une absence
de six semaines, j'ai reçu des mains de M.
Delessert votre aimable lettre du 2 mai, à la
quelle je m'empresse de répondre, après avoir fait
de mon mieux les recherches & comparaisons qu'elle
demandait de moi. Le passage entièrement votre
avis en ce qui touche le Vaccinium myrtilloides du
Botanical August Magazine (pl. 3647), évidemment le
n'est point la V. myrtilloides de Michaux. Le dernier

Donc

dont je n'ai pu trouver qu'un maigre échantillon
dans l'herbier même de Michaux (avec cette étiquette :
" Vaccin. myrtilloides - V. angustifolium Ait. ? - Bleuet
des Canadiens - bas Mistassins - Hauteurs des terres : »),
est purement à mon sens une forme à feuilles étroites
de Vaccin. pensylvanicum du même herbier de Michaux.
Cet herbier ne contient aucun échantillon qui reproduise
tout à fait votre Vacc. canadense Kalm., et c'est dans
ce herbier que V. pensylvanicum Mich. (Herb.) qui en
approche le plus. L'herbier de Vaillant renferme
au contraire des échantillons canadiens qui sont exactement
votre V. canadense Kalm., et que Vaillant ne distinguait
pas spécifiquement d'autres échantillons ^(galt canadiens) qui sont
absolument de V. pensylvanicum Mich. (Herb.) - Je

n'oserais dire qu'il avait grand tort en cela. En tout
cas, votre V. canadense paraît être très exactement l'espèce
qui est décrit & figuré sous le nom dans le Bot.
magazine, pl. 344b.

Quant à votre V. pensylvanicum, alpinum,
il manque à nos collections ; mais c'est une forme qui
me paraît justement rapportée au V. pensylvanicum
Mich. (Herb.). Elle diffère par des feuilles plus petites & plus
glabres du V. myrtilloides Mich. (Herb.), qui, ainsi que je
le disais tout à l'heure, me paraît appartenir, comme
forme peu récedant, au V. pensylvanicum Mich. (Herb.)

M. DeCainet m'a remis hier les deux brochures
que vous avez bien voulu m'envoyer, l'une relative
aux genres nouveaux dont vous venez d'enrichir diverses
familles du règne végétal, & l'autre contenant

Lully Mm -

Spring, is all expended on 14th of 1853.

Dear Sir,

I received your communication
of the 1st on the same day, for which I am greatly
obliged to you. It was my first impression that it was
not worth while to say you so much as to give you
the trouble even of reading it over. I have only
to state that I have always felt a strong interest
in the botany of North America, & particularly in
that of our new territories, & of Mexico, and that I have
been engaged in studies & in pursuits, for
which such information would be highly useful.
I have made various attempts to obtain the result
of the researches of explorers in Oregon, California,
etc. but always (with one very recent exception)
in vain. I have however been ^{equally} unsuccessful in
any of the works that have been published on a large
scale & much nearer home. Formerly I made
great efforts to obtain Emerson's Work on the
natural history of Massachusetts, but was in vain
unsuccessful. I took great pains to obtain Dr.
Torrey's Flora of New York, and to no purpose. I even
troubled him with a letter of inquiry & on
my side, as he could not assist me. I never
could get his & your Flora of North America. I now
possess a few numbers of it, which were
my habit quite contrary to my wishes, that
I trouble Dr. Torrey with an other letter, and
his reply was that not a single copy of it
could possibly be procured. Of late I have heard
of your Plantae Wrightiana, and have had in
mind to obtain the first & second parts of it,
through the kindness of Bro. Henry. I trust
that the work might be for sale, since I can
make no claim for a gratuitous copy. I have
made inquiry about the Plantae Lindheimerianae

and the *Planta Tremontiana*, the *Stamnia* etc. that are now best known. If you can direct me to an obtainable copy of this, it will be a great favor. Harvey's *Stamnia* is a beautiful and also a botanical paper by Mr. Kuhn in Vol. I. of the *Transactions of the American Academy of Arts and Sciences*, 1848. I have however received information that none of these are to be obtained, having been published by institutions, that never sell their transactions. I think it is greatly to be regretted that copies are not issued for sale. I have been endeavoring to obtain copies of some of your publications, but have never succeeded except with your *Botany of the North American*, and your *Elementary*. It seems that my inquiries have been communicated to several gentlemen, but I should never have thought of the result. Dr. Sutter has kindly offered to borrow for me, from some public library, what I require, or, if I make it an invariable rule never to borrow from, not in any case to borrow anything that can not be purchased for a price, if it happens to meet with any accident while in my possession. My few books have more than once just escaped being burnt, & some of mine have been burnt, & some of mine have been burnt, & books too, that could not be replaced. This has confirmed my rule. I give you many thanks for the trouble you have already taken to furnish what I want, but if you happen to know where the books that I want can be purchased, my wants are not so imperious, that they can not remain unsatisfied. In all probability, yours & Dr. Sutter's *Stamnia* will be as valuable to me as any ^{single} work, that I have inquired after, though it must be admitted in many Mexican & Californian plants.

I remain, dear Sir,
with the highest consideration
and respect. William Lully.
Prof. of Law, etc.
Cambridge,
(N. H.)



Prof. of Law, etc.

Cambridge,

(N. H.)



My dear Sir

Botolph

I am in need of legal advice, & as there is no one in whose opinion I should have so much confidence as in you, I venture to apply to you; & trusting to our long acquaintance & connection, I presumed to do it in this irregular way, not with the view of saving a fee, but because I feel that I can state the matter myself more clearly than it can be done by an attorney, & because I also think that you may thus possibly be induced to give me more unreservedly your sentiments.

Prior to the year 1826 I was in the habit of occasionally discounting for my friend, Mr Chas Heath, the engraver, bills on Knott Robinson & Co, which, being drawn at 6, 9, 12 or 18 months, were not negotiable in the regular course of business. —

In the latter part of 1826, both Chas Heath & Knott & Co became Bankrupts, & bills to the amount of £2400 — were returned to me as dishonoured. —

I have proved my debt against the estates of both; & both of them have since obtained their Certificates. —

On many occasions since Chas Heath obtained his certificate, he has stated to me that he considers himself bound in honor to pay my debt, which still exceeds £2200 — & that he wd do so as soon as he was able. —

About a month ago, he wrote me a letter, stating

E. W. Alderson Esq.

No 759

James R. Alderson

Albion Street
London.

Botanist

My dear Sir

Six years, if I mistake
not, have now gone by, since I have
ceased to have the pleasure, that to me
was a great one, of occasionally communi-
cations with you. My advanced age
makes it expedient that I should go
seldom to Town, & I am sorry to have
found that it seems impossible now to
pursue with you & Mrs. Lane to favour
us with your company in Japan. The
shortness of time considered, however,
however, can make and forget the many
marks of obliging attention I received
from you; & last of all, the very
tender kindness with which you assisted
my daughter, now Mrs. Brighten, in
her said attempt at lithography. The
various drawings she has made by the

Yarmouth 28th June 1857.

My dear Sir

I had intended to come
immediately upon the receipt of yours.
Unfortunately, however, I was
not known what to say - "I am sorry to
have come away," I am much sorry to
know the opportunity of enjoying the company
of yourself & Mr. Gray, and especially, I
am much obliged to have again, which,
on the other hand, it felt it to be so
difficult to ^{submit} ~~the~~ you to the trouble, the fatigue,
the expense of a journey to Yarmouth and
to give you the satisfaction of your visit,
for a short time, that I do not know
how to reject it. If you do come, it will
be a pleasure, and the train that will take
you to Norwich; and will meet you
Broadway, and about, where you wish to
be seen in that old commercial city,
the capital of Eastern England. Let Yarmouth
be a happy place for you not to give

Yarmouth

W. W. W.

W. W. W.

you will find to see these objects, unique of
their kind, & within of them about 4 miles
from my door; that in opposite directions.

There is the exact spot pointed out by bones
in existence, a camp which a German
architect took a piece of & in it was with
making a jutting corner. It is the
stone in the wall, & the stone of the (shad)
Kaltzoff, a named spot in the line of the
captains in a row, bearing feet & the stone
in front of you, I will only add - do as you
see best. In the end I shall be very
glad: in the latter, I will not complain.
My son's aunt, & friend, cannot accompany
you; as the daughter would be happy, &
we have no specimens of F. A.

William's & daughter, thank you for
the offer of the letter; but she shall find
it if my collection deserves it. May I
beg you to be sure to see for the best
interest of my daughter & of,
my dear Sir,

Yours very faithfully
D. W. H. H.

Washington D.C. Jan 3^d 1890.
Prof Sereus Watson
Cambridge
Mass.

Dear Sir:

During the summer of
1887 I found in Montana a *Brizaanthus*
which seemed to me to be perhaps
new and somewhere between *B.*
eripetiformis and *B. glanduliflora*.
Prof May desired me to send all
my specimens ^{to him} to see if the characters
of the specimen I sent him held
good throughout. I forwarded the
specimens to Cambridge just before
the death of Dr May. If at some
future time you come across these
ones you be so kind as to acquaint
me with your determination.
Very truly, yours
Ernest Cowdy, U.S. Geol. Survey.

St. Johnsbury, Vt. September 1st 1891.
Fairbanks Museum.

To the Curator of Herbarium of Harvard University
Cambridge. Mass.

Dear Sir,

Will you kindly give us some information
as to the best way of making the cases for a herbarium?
We have between 4000 and 5000 specimens and wish
to make them as available as possible. If you
could have a plan made of the cases used at Harvard
and send us, we should gladly defray all expense of
the same. What material is it best to use for the
cases and is it advisable to have glass doors?

Yours very sincerely
(Miss) M. G. Tyler for

Fairbanks Museum
St. Johnsbury, Vt.

Emb plan (#3.00) Sept. 30/
91

Tyler

W. E.

1877

St. Johnsbury, Vt. Oct. 2nd 1891 188
Fairbanks Museum.

Mr. Sereno Watson
Dear Sir

Your letter of Sept. 30th with the plans for the Herbarium case were received last evening and we are most grateful for the trouble you have taken on our behalf. The architect will be ready in a few days now to begin upon the Herbarium cases so we are glad to have them this week.

I enclose a cheque for the drawing of the plan (\$3.⁰⁰) and again expressing our gratitude for your kindness.

Believe me very sincerely yours.

Martha G. Tyler.

Hydra

beans & pumpkins, and
tobacco.

I am leaving England at
the end of the month,
but should be glad to
hear from you at Montreal,
and hope that you will see
your way to give us some
remarks on this interesting
topic

Yours very sincerely
Edward H. Tylor

Tylor-

THE MUSEUM HOUSE,
OXFORD.

July 13, 1884

Dear Sir

I understand
from Prof. Moseley that
you will read a paper
in this Biological Section
at Montreal. May I
suggest that if without
encroaching on your time

for preparing this, you
could give your views
also in the Section of
Anthropology as to the
plants cultivated by the
native tribes of N. America,
this communication would
be received with the greatest
interest. The way in which

De Candolle leaves the
subject is disappointing,
when it is considered
how much light would
be thrown on race-migrations
and civilization on the
continent by more distinct
ideas of the first centres
of cultivation of maize,

13th Oct

My dear D. May.

My first intention was
to reply to your note when it was
received, but I halted for a more con-
venient hour, was carried out of town
and since an amount of ~~other~~
blameable relations.

I write to you from
Mr. Sprague and endeavor to
make it clear to him that his views
and mine may very well be
together. Yours ever truly
Wm Lloyd Garrison
very kind regards to
Mr. May

